



ABUNDANCE, AGE, SEX, AND SIZE OF CHINOOK SALMON (Oncorhynchus tshawytscha Walbaum) CATCHES AND ESCAPEMENTS IN SOUTHEASTERN ALASKA, 1983

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August 1986

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Commissioner

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¹ This investigation was partially financed by the Anadromous Fish Conservation Act (P.L. 89-304 as amended) under Project No. AFC-72.

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ABSTRACT

Catch statistics and escapement estimates are summarized for chinook salmon (*Oncorhynchus tshawytscha* Walbaum), in Southeastern Alaska (excluding the catches and escapements in Districts 182, 183, and 192 near Yakutat) for the 1983 season. Commercial troll, seine, gillnet and trap catches were apportioned by age and size based on available sample data. The age and size composition of the 1983 troll harvest was summarized by sampling period for four areas of Southeastern Alaska. Age, sex and size data are also presented for sport and Canadian transboundary river fisheries and for escapements to 17 rivers and 4 hatcheries in the region. A total of 289,853 chinook salmon were harvested in Southeastern Alaska during the 1982-83 winter troll fishery and the 1983 summer troll, seine, gillnet, trap, sport, and subsistence fisheries. The summer troll fishery catch of 240,001 fish represented 76% of the total harvest and most were caught in outer coastal waters. Purse seine gear harvested 13,581 fish and gillnet gear harvested 4,885 fish. The sport harvest was 22,321 fish. Small harvests were taken by the Canadian commercial gillnet fisheries on the Taku and Stikine Rivers (1,551 fish), by the Annette Island Fishery Reserve fish traps (194 fish), and by subsistence fisheries on the Chilkat and Stikine Rivers (1,146 fish).

There were differences in age compositions of commercial harvests by gear type, area, and time. Most of the fish harvested in the troll and seine fisheries had gone to sea during the first year of life (aged as 0.), (74.9 and 89.5 percent respectively) while only 37.0 percent of the fish sampled from the gillnet fisheries were aged 0. The percent of fish aged 0. in the summer troll fishery was highest in the outer coastal areas. Age 0.3 and 0.4 fish predominate in the troll fishery. The percent of age 0.2 and 1.2 fish in the summer troll fishery increased through time and probably represents recruitment to the fishery. The percent of fish aged 1.3 and 1.4 decreased through time and probably represents an emigration out of the fishery and towards their spawning grounds.

Fish aged 1. predominate Alaskan samples from wild and hatchery returns. Age composition analysis reveals that virtually all the 193,644 fish aged 0. fish harvested in the summer troll and net fisheries were of non-Alaskan origin. The proportion of fish age 0. increased in the commercial harvests by 19.2% between 1982 and 1983.

KEY WORDS: catch allocation, age composition, chinook salmon, *Oncorhynchus tshawytscha*, fishery synopsis, Southeastern Alaska, catch and escapement.

INTRODUCTION

Chinook salmon (*Oncorhynchus tshawytscha* Walbaum) are harvested in commercial, sport, and subsistence fisheries in Southeastern Alaska, however, the majority are taken by the commercial troll fleet during the summer. Annual commercial catches averaged about 320,000 fish during the 1970's and early 1980's. In the 1930's the annual harvest was approximately twice this, or 610,000 fish. Since 1980 the commercial troll fleet has been managed so that the annual catch falls within a guideline harvest level established by the Alaska Board of Fisheries and the North Pacific Fisheries Management Council. In 1983 the guideline harvest level was 255,500 with a range of 243,000 to 272,000 fish, plus the estimated Alaska hatchery production of 1,130 chinook salmon.

Annual sport catches have averaged an estimated 18,320 fish from 1977 to 1983 with 22,321 fish harvested in 1983. A small number of chinook salmon are harvested in subsistence fisheries on the Chilkat and Stikine Rivers. There are 34 documented chinook salmon producing systems in Southeastern Alaska (including Yakutat) of which Stikine, Taku, and Alsek Rivers are the largest producers.

In Southeastern Alaska catches, chinook salmon are usually the least abundant however, for the last several years they have ranked third in terms of value to the fishermen. The high value of chinook salmon is due to the fact that they have consistently been the most valuable species to the troll fishermen. Most are sold in the dressed/frozen market at an average wholesale price of \$.76/lb for gillnet caught fish, \$1.07/lb for seine caught fish, and \$1.88/lb for troll caught fish (A.D.F.&G. 1984).

In this report we document the available data regarding the magnitudes and the composition by age, sex, and size of catches and escapements of chinook salmon in Southeastern Alaska during 1983. We also estimate the minimum number of non-Alaskan and maximum number of chinook salmon of Alaskan origin harvested in the summer troll, seine, and gillnet fisheries based on age composition data.

STUDY AREA AND CONDUCT OF FISHERIES

The study area consists of the coastal waters and inland drainages of Southeastern Alaska from Cape Suckling on the North to Dixon Entrance on the south, excluding the Yakutat area inshore setnet fisheries in Districts 182, 183, 185, and 192 (Figure 1). The reader is referred to McBride (1984) for data on Yakutat area catches and escapements in 1983. The region is divided into 17 coastal (101 thru 116-05 and 181) and 5 offshore (116-25, 152, 154, 157, and 189) fishing districts. The troll data was pooled into four areas since troll vessels are highly mobile and landings often include catches made in more than one district (see Methods). Chinook salmon were commercially harvested by troll gear in all districts except District 115, by seine gear in Districts 101 to 107, 109, 110, and 112 to 114, and by drift gillnet gear in Districts 101, 106, 108,

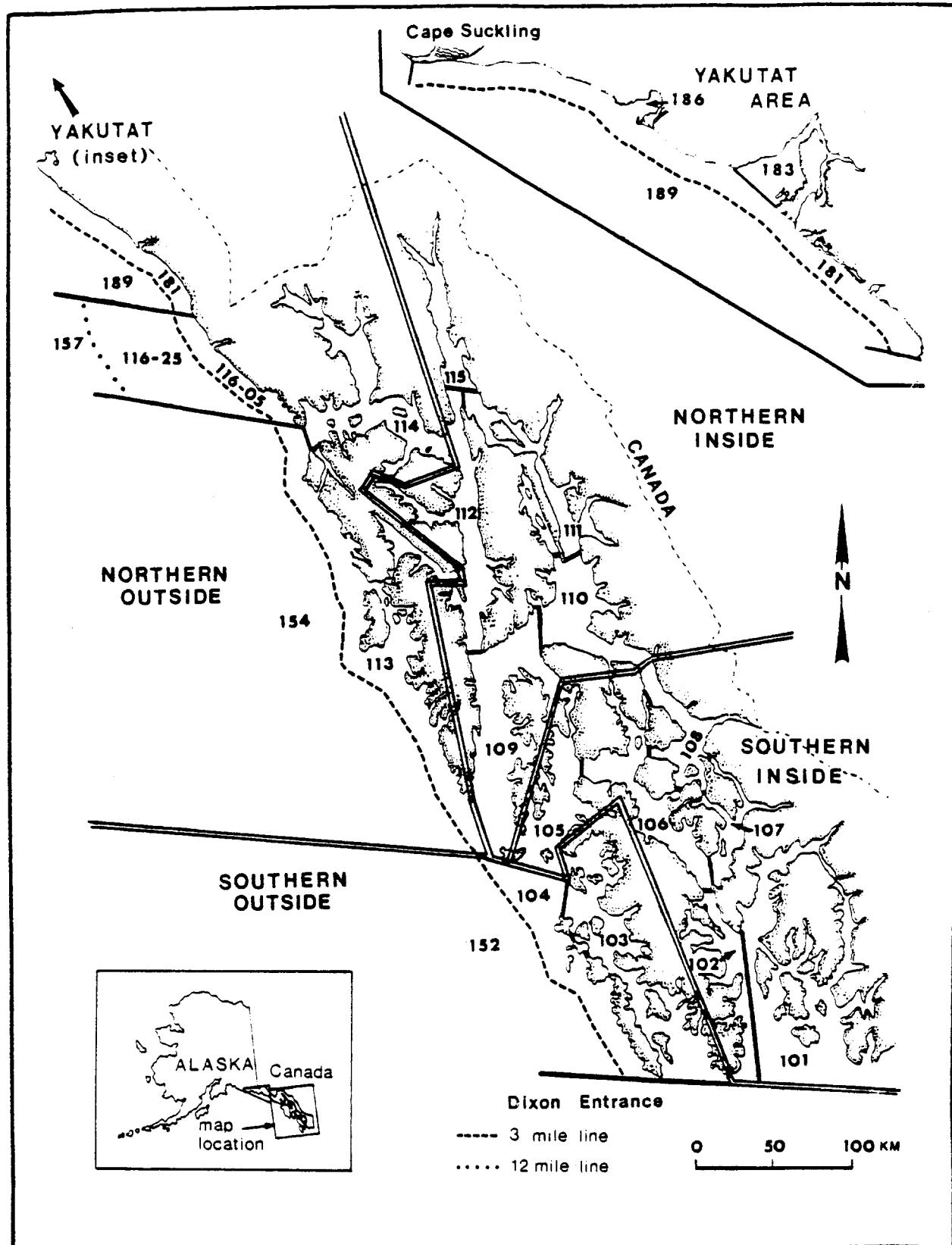


Figure 1. Map of Southeastern Alaska showing the statistical fishing districts and four areas used for analysis of the troll data.

111 and 115. Chinook salmon were also commercially caught in Canadian gillnet fisheries on the lower Taku and Stikine Rivers and in trap gear on the Annette Island Indian Reserve. Trap catches are reported to subdistrict of District 101. Sport fishing occurs throughout the region but is concentrated around the communities. Subsistence fishing in Alaska was permitted only by Klukwan residents in the Chilkat River. Small subsistence catches were also reported from the Canadian portion of the Stikine River near Telegraph Creek. Troll fishing for chinook salmon was permitted from 1 October 1982 to 14 April 1983 for the winter fishery, 15 May through 8 July and from July through 4 August for the summer fishery. Seine fishing was permitted from 3 July to 14 September, and gillnet fishing was permitted from 19 June to 10 October. A complete summary of regulations affecting the regions fisheries may be found in A.D.F.&G. (1983a). Copies of Emergency Fishing Orders with specified fishing times and areas during the season may be obtained from Alaska Department of Fish and Game¹.

METHODS

Data Sources

Data from several sources on the number, weight, and age, sex, and size composition of chinook salmon catches and escapements in Southeastern Alaska in 1983 are summarized.

Catch Statistics:

Alaskan commercial catch data (number and total weight of chinook salmon sold by gear type, district, and week) was compiled by the Division of Commercial Fisheries, Alaska Department of Fish and Game. These data are based on computer tabulations of individual sales slips (fish tickets) as of 26 October 1984. Because of the possibility that all imbedded data entry or recording errors have not been corrected, later summaries may differ slightly from those used in this report. Such errors are too small to be of consequence to our allocations of commercial catches by a gear type, area, and time. The average weights of troll caught fish are based on dressed (gilled and gutted) fish and the seine and gillnet fisheries land both dressed and round fish, so average weight might not be an accurate indicator of size by time or area.

Canadian commercial and food fishery catch statistics for the Taku and Stikine Rivers were provided by the Canadian Department of Fisheries and Oceans (CDF&O) Whitehorse staff. Catch data provided by CDF&O were factored into two size classes, small and large fish. A small fish was defined as fish less than 5 pounds, 500 mm in fork length, and aged .2 or less. No weight data is available for the Canadian Transboundary River fisheries. Sport catch was obtained from Mills (1984) and is based on responses from a mailout questionnaire survey of randomly selected residents holding sport fishing licenses. Subsistence catch information

¹ Division of Commercial Fisheries, P.O. Box 20, Douglas, Ak. 99824-0020.

was tabulated from subsistence use permits returned to the Alaska Department of Fish and Game. All subsistence permits were not returned, however, so subsistence catch totals listed in this report underestimate the total subsistence harvest from the region.

Escapement Counts:

Several methods were used to obtain estimates of spawning population size. Among them were counts from airplanes, helicopters, and boats, counts made on foot surveys, counts through weirs of upstream migrants and counts of carcasses which float downstream and are caught by weirs. An effort was made to survey most of the important spawning areas. For several streams, multiple surveys were made. We report only the peak count for these streams. Detailed survey data are available¹. Zero, one, and two ocean "jack" chinook salmon are not counted in the aerial surveys because their small size makes them difficult to see and to distinguish from other non-chinook species.

Age, Sex, and Size:

Summer troll, seine, and gillnet catches of chinook salmon were sampled by Department employees stationed at the Southeastern ports of Craig, Ketchikan, Port Alexander, Petersburg, Sitka, Juneau, Excursion Inlet, Pelican, and Yakutat. Sampling was also conducted at several smaller buying stations and aboard tenders. Sampling of winter troll catches was limited to the ports of Ketchikan, Petersburg, Sitka and Hoonah from 13 March to 14 April. Sampling was conducted on fish landed by tenders of both the net and troll fisheries and from landings of individual boats. Three scales were obtained from the preferred area (I.N.P.F.C. 1963) of each fish, mounted on gum cards and impressions made in cellulose acetate (Clutter and Whitesel 1956). Age was determined by visual examination of scale impressions under moderate (40X) magnification (see Van Aken and Wood 1983). Ages are reported in European notation. All lengths were measured from mid-eye to fork-of-tail to the nearest half centimeter with the exception of sport caught fish which were measured from tip-of-snout to fork-of-tail. Dimorphic maturation characteristics were used to determine sex of fish sampled in escapements. Sex was not determined for fish sampled from the commercial catch because secondary sexual characteristics were not present and most fish were dressed at time of delivery.

Difficulties were encountered in representatively sampling the commercial catch because sampling occurred at processing facilities where fish were usually sorted by size (usually small [<4.1 kg (9 lb)], medium [4.1 to 5 kg (9 to 11 lb)], and large [>5 kg (11 lb)]) and quality (two grades) into different bins. Unless the entire delivery was sampled a possibility of bias exists. We dealt with this problem by first attempting to sample the entire delivery or by either sampling from each bin in proportion to abundance or by sampling every nth fish sorted.

Scale, sex, and size data was obtained from carcasses during foot surveys in all escapements except the test gillnet and fishwheel catches on the

¹ Survey data are available from Alaska Dept. of Fish and Game, Division of Commercial Fisheries, P.O. Box 20, Douglas, Ak. 99824-0020.

Taku and Stikine Rivers, the weir sites on Andrews Creek, King Salmon, and Little Trapper Lake, and the Fisheries Rehabilitation Enhancement and Development Division (F.R.E.D.) egg take on the Tahini River. Samples of the Nakina River escapement were obtained both at a carcass weir and by foot surveying. In the Nakina River, length and sex was recorded for all carcasses encountered and scales were subsampled from 50 fish by sex for each 25 mm length group. The subsample of aged fish was then used to estimate the age composition of all fish sampled for length and sex.

Analysis Strata

Several factors guided us in development of sampling and analysis strata for age, sex, and size data. First among them was logistic and cost considerations and trade offs required to obtain samples over such a broad geographic region. Second, was our desire to treat principle gear types (troll, seine, gillnet, and sport) separately. Third was our desire to examine the data for temporal trends. Lastly, we desired to maintain a one in ten chance that our estimate of the age composition of each strata did not exceed plus or minus five percent of the true value. We used the equations of Cochran (1977), corrected for finite population size as appropriate (Appendix Table 1) and assumed the presence of seven age classes to compute the desired sample size for a strata.

Troll:

While district fished is recorded on sales slips, the accuracy of these data is suspect for the summer troll fishery. The problem arises from the highly mobile nature of the fleet, and its tendency to concentrate in areas of fish abundance which often cross statistical district boundaries. For example a popular troll fishing area is Cross Sound and boats fishing this area may actually fish in three districts (113, 114, and 116). Similarly, sample data for age, and size composition often comes from individual vessels which have fished such areas or form a tender servicing similar fisheries. For these reasons we recognized a need to pool statistical districts into larger "areas" for the purpose of reporting harvest and for characterizing age and size compositions.

Based upon the results of skipper interviews, we identified four areas for which only minor cross-area reporting occurs during the summer fishery. The four areas (Figure 1) are: (1) Northern Outside composed of Districts 113, 114, 116, 154, 157, 181, and 189; (2) Southern Outside composed of Districts 103, 104, and 152; (3) Northern Inside composed of Districts 109, 110, 111, 112, and 115; and (4) Southern Inside composed of Districts 101, 102, 105, 106, 107, and 108. During the winter troll fishery, we included District 114 in the Northern Inside area because most of the fishing effort is concentrated well inside Icy Straits and this District is more properly an inside versus an outside fishery. We also provide catch data reported by district, but caution the reader in the use of these data. Catches by hand and power troll gear were combined for analysis of age, sex, and size data.

Whenever sample sizes permitted, the data were stratified over time into sampling periods. Since the age composition of chinook salmon populations often changes systematically throughout the migratory season, from one age

class to another, the grouping of samples into a sampling period was a compromise between a reasonably precise age composition and reducing the bias which results from grouping the sampling periods. Standard errors of the numbers of fish caught of each age were calculated by standard binomial formulas. The age composition and associated standard error of the total commercial catch by area was calculated by weighting the estimated sample age distribution and its standard error each sampling period by the total commercial catch reported during that same sampling period. Mean Length and its standard error was calculated for each area, period, and age class.

Seine, Gillnet, Trap, Sport, and Subsistence:

Sampling of chinook salmon harvested by seine and gillnet gear was intended to accurately describe the age composition of the seasons catch by gear type and district. Samples were generally obtained weekly from each open district. The seine and gillnet fleet harvests chinook salmon incidentally to other salmon species, hence individual vessel landings and season total catches were low. The low abundance of chinook salmon in catches and the tendency for vessel owners to market them separately generated logistic problems in access to fish for sampling; for this reason we occasionally obtained fewer samples than desired. We partially compensated for this deficiency in the seine fishery by combining districts into larger areas similar to those used to characterize troll fishery catches. Since the four area scheme is of little benefit in characterizing the gillnet harvests, we simply present the data by district, recognizing limitations of precision resulting from sample sizes.

Historically, Annette Island Indian Reserve trap catches of chinook salmon have been small. The high cost of obtaining samples for age and size composition in relation to harvest level precluded obtaining these data.

The definitions of the strata used to characterize the age and size composition of the sport fishery harvest were determined by available samples collected during Sport Fish Division creel sampling.

Escapement:

The high cost associated with access to spawning grounds and the low abundance of fish to sample precludes precise characterization of the age, sex, and size composition of Southeast chinook salmon spawning populations. Most samples on which we report were obtained opportunistically in conjunction with other studies. Often gear used to obtain samples caused bias and caution needs to be exercised in interpretation.

The total natural run escapement to nine "index" river systems (including Yakutat) was estimated by expanding survey counts by the estimated aerial counting rates and for tributaries not surveyed. Escapement counts for returns in the Situk and Alsek Rivers near Yakutat were included since these runs were believed to contribute to the offshore troll fishery (ADF&G 1983b). The Region escapement was estimated by expanding the total escapement estimate for index rivers within each of three categories (major, medium, or minor producers) by the number of rivers in that category. The expansion factors used in this report are those presented in ADF&G (1982).

While accuracy of these estimates is unknown, they are useful in assessing the interannual variability of abundance and distribution of the escapement.

RESULTS AND DISCUSSION

Harvest Statistics

The reported catch in numbers and total and average weights of chinook salmon is presented for the Commercial Fisheries by gear type, district, and week. Actual catch was higher than reported since some were kept for personal use and some net caught fish less than 711 mm (28 in.) were delivered and reported as pink salmon (*O. gorbuscha*). Personal use retention occurs in all commercial fisheries but is considered insignificant relative to reported catches.

Numbers and Landed Weight:

A total of 314,871 chinook salmon were harvested in commercial, sport, and subsistence fisheries in 1983 (Table 1). Ocean commercial gear accounted for most (92%) of the harvest followed by the sport fishery (7%) and the Canadian Transboundary River Fisheries (.8%). Small catches were reported by domestic subsistence fisheries. Of the 289,853 fish commercially harvested by U.S. fishermen most (94%) were harvested by troll gear with smaller catches by seine, gillnet, and trap gear, respectively. Total weight and average weight data is presented in Appendix Tables 2 to 17 for the troll, seine, and gillnet catches.

Troll. The winter troll fishery (1 October 1982-14 April 1983) harvested 31,192 fish (Table 2). A high proportion of the catch occurred during the months of October, March and April in the Northern Outside and Southern Inside areas. The power troll fleet accounted for most (81%) of the harvest. Some differences are evident in the spatial distribution of power troll catches (Table 3) in relation to hand troll catches (Table 4). The most notable is that the hand troll fleet tended to concentrate in Icy Straits (District 114) while the power troll fleet reported most of the catches from the outer coast of Baranof and Chichagof Islands (District 113).

The summer troll fishery harvested 240,001 fish (Table 5). The majority were harvested in the Northern Outside area by the power troll fleet (Table 6). The hand troll fleet also reported most of its catch from this area (Table 7). Peak period landings occurred just prior to and following the June closure. Fish caught in the Northern Outside area had the largest average weight and those in the Southern Inside area had the smallest average weight (Appendix Tables 13 to 15). Average weights increased slightly through the reporting year.

Seine. The purse seine catch of 13,581 fish (Table 8) was centered in District 104 (the Noyes Island fishery) but significant catches also occurred in District 113. Catches were highest during the first half of the seine fishery in District 104 and during the first week of August in

Table 1. Harvest of chinook salmon in Southeastern Alaska, 1983.

Fishery	Hand	Power	Number	Percent
Ocean Commercial	-----	-----		
Winter Troll	5,907	25,285	31,192	9.9
Summer Troll	32,759	207,242	240,001	76.2
Seine			13,581	4.3
Gillnet			4,885	1.6
Trap			194	0.1
Subtotal			289,853	92.1
Sport			22,321	7.1
Alaskan Subsistence			35	<0.1
Canadian Transboundary				
Taku Commercial			554	0.2
Stikine Commercial			997	0.3
Stikine Subsistence			1,111	0.4
Subtotal			2,662	0.8
Total			314,871	100.0

Table 2. Winter troll fishery harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1 October 1982 to 14 April 1983. Dash (-) indicates district was closed to fishing for that particular week.

Stat. Year Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts						Northern Outside Districts						Total		
		101	102	103	106	107	108	103	104	152	109	110	111	112	114	115	113	116	154	157	181	183	109		
1982	40 01 Oct-02 Oct	16	5	0	0	0	2	0	0	-	0	0	0	0	23	0	29	-	-	0	0	-	69		
	41 03 Oct-09 Oct	262	77	18	100	353	99	0	0	-	154	71	0	51	728	0	518	-	-	0	70	-	2,500		
	42 10 Oct-16 Oct	197	327	0	318	14	44	14	0	-	17	90	0	0	396	0	361	-	-	0	40	-	1,818		
	43 17 Oct-23 Oct	239	332	19	178	93	69	2	0	-	281	56	0	0	303	0	723	-	-	0	15	-	2,310		
	44 24 Oct-30 Oct	155	215	0	116	20	110	0	4	-	49	143	0	0	271	0	110	-	-	0	0	-	1,193		
	45 31 Oct-06 Nov	70	216	0	31	150	2	1	0	-	80	65	0	0	273	0	78	-	-	0	0	-	966		
	46 07 Nov-13 Nov	122	191	0	93	22	2	9	41	-	0	36	0	0	50	0	236	-	-	0	0	-	402		
	47 14 Nov-20 Nov	91	158	0	39	5	1	0	0	-	18	2	0	0	32	0	198	-	-	0	0	-	544		
	48 21 Nov-27 Nov	242	14	17	0	18	11	23	0	-	0	0	0	0	15	0	215	-	-	0	0	-	553		
	49 28 Nov-04 Dec	13	33	0	5	0	18	35	0	-	0	4	0	0	25	0	452	-	-	0	0	-	565		
	50 05 Dec-11 Dec	14	31	0	1	48	0	32	55	-	0	0	0	0	2	0	139	-	-	0	0	-	322		
	51 12 Dec-18 Dec	24	0	0	1	22	103	0	24	-	11	0	0	0	0	0	95	-	-	0	0	-	288		
	52 19 Dec-25 Dec	8	0	0	0	86	0	14	0	-	0	3	1	0	0	0	312	-	-	0	0	-	432		
	53 26 Dec-31 Dec	6	52	0	0	47	0	0	0	-	0	0	0	0	0	0	28	-	-	0	0	-	133		
	Unspecified	1	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	-	-	0	0	-	1		
1983	1 01 Jan-01 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	1	0	1	-	-	0	0	-	2		
	2 02 Jan-08 Jan	7	3	0	2	62	27	0	6	-	0	1	0	0	7	0	41	-	-	0	0	-	156		
	3 09 Jan-15 Jan	3	17	0	0	67	0	0	0	-	0	0	0	0	12	0	5	-	-	0	0	-	104		
	4 16 Jan-22 Jan	1	0	0	1	53	7	2	12	-	0	0	0	0	9	0	122	-	-	0	0	-	207		
	5 23 Jan-29 Jan	0	2	0	1	0	0	9	0	-	1	0	0	0	0	0	405	-	-	0	0	-	418		
	6 30 Jan-05 Feb	0	20	22	5	0	17	35	30	-	17	21	0	0	36	0	425	-	-	0	0	-	626		
	7 06 Feb-12 Feb	0	8	29	1	10	21	41	23	-	88	5	0	0	66	0	197	-	-	0	0	-	469		
	8 13 Feb-19 Feb	3	19	30	24	0	28	239	54	-	22	1	0	0	15	0	472	17	-	0	0	-	907		
	9 20 Feb-26 Feb	15	26	36	44	0	2	41	41	-	32	0	0	0	13	0	182	-	-	0	0	-	432		
	10 27 Feb-05 Mar	6	17	7	5	0	12	123	89	-	54	13	0	0	108	0	591	-	-	0	11	-	1,036		
	11 06 Mar-12 Mar	1	8	21	57	48	3	95	36	-	83	2	0	0	51	0	922	27	-	0	0	-	1,325		
	12 13 Mar-19 Mar	11	12	77	88	56	33	183	57	-	133	5	0	0	106	0	474	37	-	0	0	-	1,153		
	13 20 Mar-26 Mar	42	76	0	60	18	18	275	25	-	336	1	0	0	235	0	1,316	47	-	0	18	-	2,412		
	14 27 Mar-02 Apr	20	33	39	47	36	39	233	10	-	28	5	0	0	435	0	521	-	-	0	0	-	1,446		
	15 03 Apr-09 Apr	47	40	38	114	122	55	270	70	-	236	4	0	0	375	0	1,247	-	-	0	14	-	2,632		
	16 10 Apr-14 Apr	140	270	251	289	5/	51	63	681	17	-	704	7	0	25	631	0	2,143	67	-	0	125	7/	5,317	
District Total		1,756	2,218	604	1,620	1,393	786	2,197	594	0	2,343	535	1	76	4,210	0	12,558	0	0	0	0	293	0	31,192	
Area Total		8,377						2,791						7,173						12,851					

1/ Includes 167 chinook reported in District 157.

6/ Includes 2 chinook reported in statistical week 17.

2/ Includes 51 chinook reported in District 116.

Includes 72 chinook reported in District 116.

3/ Includes 52 chinook reported in District 116.

7/ Includes 25 chinook reported in statistical week 17.

4/ Includes 184 chinook reported in District 116.

Includes 59 chinook reported in statistical week 18.

5/ Includes 5 chinook reported in statistical week 17.

Includes 14 chinook reported in statistical week 19.

Includes 7 chinook reported in statistical week 20.

Table 3. Winter power troll harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1 October 1982 to 14 April 1983. Dash (-) indicates district closed to fishing for that particular area.

Stat. Year	Inclusive Week Bates	Southern Inside Districts										Southern Outside Districts					Northern Inside Districts					Northern Outside Districts					Total				
		101	102	105	106	107	108	103	104	152	109	110	111	112	114	115	113	116	154	157	181	183	189								
1982	40	01 Oct-02 Oct	10	5	0	0	0	0	0	-	0	0	0	0	4	0	23	-	-	-	0	0	-	42							
	41	03 Oct-09 Oct	242	55	0	68	290	45	0	0	-	113	45	0	35	358	0	482	-	-	0	0	-	1,733							
	42	10 Oct-16 Oct	104	306	0	289	14	39	14	0	-	17	89	0	0	219	0	295	-	-	0	0	-	1,466							
	43	17 Oct-23 Oct	203	321	0	175	93	67	2	0	-	187	46	0	0	157	0	636	-	-	0	0	-	1,887							
	44	24 Oct-30 Oct	139	200	0	71	0	70	0	0	-	0	143	0	0	133	0	88	-	-	0	0	-	844							
	45	31 Oct-06 Nov	65	187	0	21	81	1	1	0	-	34	63	0	0	126	0	64	-	-	0	0	-	643							
	46	07 Nov-13 Nov	113	185	0	80	15	1	0	41	-	0	31	0	0	4	0	225	-	-	0	0	-	695							
	47	14 Nov-20 Nov	57	104	0	20	5	0	0	0	-	10	0	0	0	12	0	190	-	-	0	0	-	414							
	48	21 Nov-27 Nov	242	14	17	0	18	11	12	0	-	0	0	0	0	0	0	211	-	-	0	0	-	525							
	49	28 Nov-04 Dec	13	7	0	4	0	17	35	0	-	0	0	0	0	0	0	422	-	-	0	0	-	498							
	50	05 Dec-11 Dec	10	29	0	0	30	0	22	55	-	0	0	0	0	2	0	115	-	-	0	0	-	263							
	51	12 Dec-18 Dec	11	8	0	0	0	7	103	0	24	-	11	0	0	0	0	0	0	0	0	0	-	245							
	52	19 Dec-25 Dec	6	0	0	0	0	52	8	14	0	-	0	3	0	0	0	0	0	0	0	0	-	369							
	53	26 Dec-31 Dec	6	39	0	0	8	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	74							
1983	Unspecified		1	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	1							
	1	01 Jan-01 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	1							
	2	02 Jan-08 Jan	7	3	0	0	19	0	0	6	-	0	0	0	0	0	0	0	0	0	0	0	-	68							
	3	09 Jan-15 Jan	3	17	0	0	67	0	0	0	-	0	0	0	0	0	0	12	0	0	0	0	-	102							
	4	16 Jan-22 Jan	1	0	0	0	14	1	2	12	-	0	0	0	0	0	0	0	0	0	0	0	-	143							
	5	23 Jan-29 Jan	0	2	0	0	0	0	9	0	-	0	0	0	0	0	0	0	0	0	0	0	-	415							
	6	30 Jan-05 Feb	0	17	0	0	0	12	35	30	-	17	0	0	0	0	0	0	0	0	0	0	-	495							
	7	06 Feb-12 Feb	0	6	29	0	7	12	41	23	-	0	0	0	0	0	0	0	0	0	0	0	-	398							
	8	13 Feb-19 Feb	3	15	16	22	0	14	226	54	-	10	1	0	0	0	0	0	0	0	0	0	-	827							
	9	20 Feb-26 Feb	15	10	36	42	0	0	41	41	-	11	0	0	0	0	2	0	0	0	0	0	-	357							
	10	27 Feb-05 Mar	3	17	0	2	0	2	55	79	-	36	5	0	0	0	14	0	0	0	0	0	-	793							
	11	06 Mar-12 Mar	7	8	21	51	18	3	92	23	-	67	0	0	0	0	0	0	0	0	0	0	-	1,166							
	12	13 Mar-19 Mar	7	12	50	73	44	17	99	57	-	110	0	0	0	0	25	0	0	0	0	0	-	932							
	13	20 Mar-26 Mar	37	50	0	32	5	0	253	25	-	327	0	0	0	0	201	0	0	1,229	47	-	-	-	-	-	2,159				
	14	27 Mar-02 Apr	11	33	23	38	13	17	216	10	-	19	4	0	0	0	285	0	0	367	-	-	0	0	-	1,838					
	15	03 Apr-09 Apr	16	30	38	97	92	25	175	53	-	197	0	0	0	0	309	0	0	1,149	-	-	0	0	-	2,190					
	16	10 Apr-14 Apr	56	254	177	229	5/	46	38	521	12	-	641	3	0	19	399	0	0	2,041	6/	-	-	0	0	66	7/	0	4,502		
	District Total		1,470	1,534	407	1,322	938	503	1,067	345	0	1,911	433	0	54	2,262	0	11,564	0	0	0	0	75	0	25,285						
	Area Total		6,574					2,412					4,660					11,639													

1/ Includes 167 chinook reported in District 157.

2/ Includes 51 chinook reported in District 116.

3/ Includes 52 chinook reported in District 116.

4/ Includes 184 chinook reported in District 116.

5/ Includes 5 chinook reported in statistical week 17.

6/ Includes 72 chinook reported in District 116.

7/ Includes 8 chinook reported in statistical week 17.

Includes 48 chinook reported in statistical week 18.

Includes 2 chinook reported in statistical week 19.

Table 4. Winter hand troll harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1 October 1982 to 14 April 1983. Dash (-) indicates district closed to fishing for that particular week.

Year	Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts				Northern Inside Districts						Northern Outside Districts						Total
			101	102	105	106	107	108	103	104	152	109	110	111	112	114	115	113	116	154	157	181	183	189	
1982	40	01 Oct-02 Oct	0	0	0	0	0	2	0	0	-	0	0	0	0	19	0	6	-	-	-	0	0	-	27
	41	03 Oct-09 Oct	20	22	18	32	63	54	0	0	-	40	26	0	16	370	0	35	-	-	-	0	70	-	767
	42	10 Oct-16 Oct	13	21	0	29	0	5	0	0	-	0	1	0	0	177	0	66	-	-	-	0	40	-	352
	43	17 Oct-23 Oct	36	11	19	3	0	2	0	0	-	94	18	0	0	146	0	87	-	-	-	0	15	-	423
	44	24 Oct-30 Oct	16	15	0	45	20	40	0	4	-	49	0	0	0	138	0	22	-	-	-	0	0	-	349
	45	31 Oct-06 Nov	5	29	0	10	69	1	0	0	-	46	2	0	0	147	0	14	-	-	-	0	0	-	323
	46	07 Nov-13 Nov	9	6	0	13	7	1	9	0	-	0	5	0	0	46	0	11	-	-	-	0	0	-	107
	47	14 Nov-20 Nov	34	54	0	11	0	1	0	0	-	0	2	0	0	20	0	8	-	-	-	0	0	-	120
	48	21 Nov-27 Nov	0	0	0	0	0	0	11	0	-	0	0	0	0	15	0	4	-	-	-	0	0	-	30
	49	28 Nov-04 Dec	0	26	0	1	0	1	0	0	-	0	4	0	0	25	0	30	-	-	-	0	0	-	87
	50	05 Dec-11 Dec	4	2	0	1	18	0	10	0	-	0	0	0	0	0	0	24	-	-	-	0	0	-	59
	51	12 Dec-18 Dec	13	0	0	1	15	0	0	-	0	0	0	0	0	0	0	14	-	-	-	0	0	-	43
	52	19 Dec-25 Dec	0	0	0	0	34	0	0	-	0	0	1	0	0	0	28	-	-	-	0	0	-	63	
	53	26 Dec-31 Dec	0	13	0	0	39	0	0	-	0	0	0	0	0	0	7	-	-	-	0	0	-	59	
1983	1	01 Jan-01 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	1	0	0	-	-	-	0	0	-	1
	2	02 Jan-08 Jan	0	0	0	2	43	27	0	0	-	0	1	0	0	7	0	8	-	-	-	0	0	-	88
	3	09 Jan-15 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	2	-	-	-	0	0	-	2
	4	16 Jan-22 Jan	0	0	0	1	39	6	0	0	-	0	0	0	0	9	0	9	-	-	-	0	0	-	64
	5	23 Jan-29 Jan	0	0	0	1	0	0	0	0	-	1	0	0	0	0	0	1	-	-	-	0	0	-	3
	6	30 Jan-05 Feb	0	11	22	5	0	5	0	0	-	0	21	0	0	36	0	41	-	-	-	0	0	-	141
	7	06 Feb-12 Feb	0	2	0	1	3	9	0	0	-	0	5	0	0	66	0	5	-	-	-	0	0	-	91
	8	13 Feb-19 Feb	0	4	14	2	0	14	13	0	-	4	0	0	0	15	0	14	-	-	-	0	0	-	80
	9	20 Feb-26 Feb	0	16	0	2	0	2	0	0	-	21	0	0	0	11	0	23	-	-	-	0	0	-	75
	10	27 Feb-05 Mar	3	0	7	3	0	10	68	10	-	18	8	0	0	94	0	11	-	-	-	0	11	-	243
	11	06 Mar-12 Mar	0	0	0	6	22	0	3	13	-	16	2	0	0	51	0	46	-	-	-	0	0	-	159
	12	13 Mar-19 Mar	4	0	27	15	12	16	4	0	-	23	5	0	0	81	0	36	-	-	-	0	0	-	223
	13	20 Mar-26 Mar	5	26	0	28	13	10	22	0	-	9	1	0	0	34	0	87	-	-	-	0	18	-	253
	14	37 Mar-02 Apr	9	0	16	9	23	22	15	0	-	9	1	0	0	150	0	154	-	-	-	0	0	-	408
	15	03 Apr-09 Apr	31	10	0	17	30	30	95	17	-	39	4	0	0	66	0	98	-	-	-	0	5	-	442
	16	10 Apr-14 Apr	84	16	74	60	5	25	80	5	-	63	4	0	6	232	0	102	17	-	-	0	59	27	815
	District Total		286	284	197	298	455	283	330	49	0	432	102	1	22	1,956	0	994	0	0	0	0	218	0	5,987
	Area Total										1,883		379					2,513					1,212		

1/ Includes 2 chinook reported in statistical week 17.

2/ Includes 17 chinook reported in statistical week 17.

Includes 11 chinook reported in statistical week 18.

Includes 12 chinook reported in statistical week 19.

Includes 7 chinook reported in statistical week 20.

Table 5. Summer troll fishery harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1983.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts				Northern Inside Districts						Northern Outside Districts						Total	
		101	102	103	106	107	108	103	104	152	109	110	111	112	115	113	114	116	154	157	181	183	189		
21	15 May-21 May	27	237	258	66	556	0	869	3,589	0	558	181	0	86	0	3,863	1,142	2,563	31	113	0	78	0	14,137	
22	22 May-28 May	392	1,773	842	225	633	13	1,432	4,543	0	1,267	976	0	184	0	5,977	1,705	5,408	24	1,700	169	156	58	27,409	
23	29 May-04 Jun	159	2,224	325	583	709	18	947	5,189	0	1,296	536	0	362	0	5,973	2,122	2,330	162	389	0	106	45	23,335	
24	05 Jun-07 Jun	703	2,681	875	555	521	0	1,006	3,493	0	1,946	1,165	0	332	0	10,837	2,525	2,850	593	4,814	183	406	216	35,701	
27	01 Jul-02 Jul	133	110	157	350	98	0	304	789	0	125	17	16	0	147	2	2,515	172	27	100	0	0	0	0	5,098
28	03 Jul-09 Jul	1,172	2,682	736	1,340	332	0	965	4,934	0	1,706	1,065	0	698	6	22,841	1,598	607	1,022	282	0	373	249	42,608	
29	10 Jul-16 Jul	713	1,381	263	252	181	11	623	2,473	2	1,589	591	0	745	2	10,073	1,108	572	134	189	23	310	0	21,235	
30	17 Jul-23 Jul	949	1,763	278	944	3	0	631	1,820	0	1,479	951	0	671	3	11,759	1,062	521	624	115	0	272	191	24,864	
31	24 Jul-30 Jul	634	1,120	183	462	33	12	472	1,692	0	1,310	535	0	807	0	12,535	1,008	1,243	0	0	0	56	0	22,162	
32	31 Jul-04 Aug	572	3/ 1,014	348	501	0	0	181	949	0	1,200	617	0	396	1	13,332	5/ 1,706	4/ 2,491	0	209	156	117	6/ 530	7/ 24,320	
District Total		5,454	14,985	4,265	5,198	3,058	54	7,430	29,479	2	12,416	6,553	0	4,428	14	99,705	14,168	18,765	2,530	7,811	531	1,874	1,281	246,001	
Area Total		33,014						36,911						23,411						146,665					

- 1/ Includes 9 chinook reported in statistical week 26.
- 2/ Includes 89 chinook reported in statistical week 26.
- 3/ Includes 12 chinook reported in statistical week 35.
- 4/ Includes 11 chinook reported in statistical week 34.
- Includes 2 chinook reported in statistical week 35.
- Includes 19 chinook reported in statistical week 36.
- 5/ Includes 1,263 chinook reported in statistical week 33.
- Includes 389 chinook reported in statistical week 36.
- 6/ Includes 33 chinook reported in statistical week 34.
- 7/ Includes 530 chinook reported in statistical week 33.

Table 6. Summer power troll fishery harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1983.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts						Northern Outside Districts						Total		
		101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	154	157	181	183	189		
21	15 May-21 May	10	130	122	24	344	0	326	3,325	0	384	14	0	0	0	3,129	789	2,527	31	113	0	0	0	11,268	
22	22 May-28 May	296	1,226	624	167	376	13	773	4,341	0	918	768	0	44	0	5,388	1,269	5,310	24	1,700	169	36	0	23,426	
23	29 May-4 Jun	157	1,637	172	409	414	18	533	4,878	0	969	328	0	182	0	5,357	1,396	2,274	102	389	0	51	45	19,311	
24	05 Jun-07 Jun	563	2,137	820	481	287	0	730	3,240	0	1,616	924	0	184	0	10,326	2,124	2,823	593	4,814	183	217	216	32,217	
27	01 Jul-02 Jul	18	9	68	197	73	0	126	619	0	93	0	0	36	0	1,934	27	180	0	0	0	0	0	3,380	
28	03 Jul-09 Jul	929	2,048	455	1,162	239	0	459	4,535	0	1,442	760	0	337	0	21,457	1,090	599	1,022	282	0	347	249	37,412	
29	10 Jul-16 Jul	554	1,045	177	162	115	0	301	2,278	2	1,387	241	0	232	0	9,501	753	435	134	189	23	268	0	17,789	
30	17 Jul-23 Jul	762	1,373	222	814	3	0	309	1,573	0	1,091	828	0	308	0	11,223	883	401	624	115	0	230	191	20,958	
31	24 Jul-30 Jul	523	869	126	278	33	0	210	1,548	0	1,019	418	0	323	0	11,929	707	1,009	0	0	19	0	0	19,011	
32	31 Jul-04 Aug	463	887	315	444	0	0	119	882	0	968	479	0	189	0	13,012	17	1,360	2,365	0	209	156	39	530	
																								2/	22,417
District Total		4,275	11,361	3,101	4,138	1,884	31	3,886	27,219	2	9,879	4,760	0	1,835	0	93,248	10,398	17,923	2,530	7,811	531	1,199	1,231	207,242	
Area Total																									134,871

1/ Includes 1,250 chinook reported in statistical week 33.

Includes 389 chinook reported in statistical week 36.

2/ Includes 530 chinook reported in statistical week 33.

Table 7. Summer hand troll harvest of chinook salmon in Southeastern Alaska by district and statistical week, 1983. Dash (-) indicates district closed to fishing for that particular week.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts						Northern Outside Districts						Total		
		101	102	105	106	107	108	103	104	102	109	110	111	112	115	113	114	116	154	157	181	183	189		
21	15 May-21 May	17	107	136	42	212	0	543	264	0	174	87	0	86	0	734	353	36	0	0	0	78	0	2,069	
22	22 May-28 May	96	547	218	58	257	0	659	202	0	297	206	0	140	0	597	436	98	0	0	0	120	50	3,903	
23	29 May-04 Jun	2	587	153	94	295	0	414	311	0	327	208	0	100	0	616	726	56	0	0	0	55	0	4,024	
24	05 Jun-07 Jun	140	544	55	74	234	0	276	253	0	330	241	0	148	0	511	401	27	0	0	0	189	0	3,423	
27	01 Jul-02 Jul	115	101	89	153	17	0	178	170	0	32 1/	16	0	111 2/	2	581	145	0	0	0	0	0	0	0	1,710
28	03 Jul-09 Jul	243	634	281	178	93	0	506	399	0	264	305	0	361	6	1,384	508	0	0	0	0	26	0	5,196	
29	10 Jul-16 Jul	159	336	86	90	66	11	322	195	0	202	350	0	513	2	572	355	137	0	0	0	50	0	3,446	
30	17 Jul-23 Jul	187	390	56	130	0	0	322	255	0	388	123	0	363	3	536	199	120	0	0	0	42	0	3,114	
31	24 Jul-30 Jul	111	251	57	184	0	12	262	144	0	291	117	0	404	0	606	301	234	0	0	0	37	0	3,091	
32	31 Jul-04 Aug	109 3/	127	33	57	0	0	62	67	0	232	138	0	207 4/	1	320 5/	346	126	0	0	0	78 6/	0	1,903	
District Total		1,179	3,624	1,164	1,060	1,174	23	3,544	2,268	0	2,537	1,793	0	2,533	14	6,457	3,770	842	0	0	0	675	50	32,759	
Area Total		8,224						5,884						6,937						11,794					

1/ Includes 9 chinook reported in statistical week 26.

2/ Includes 89 chinook reported in statistical week 26.

3/ Includes 12 chinook reported in statistical week 35.

4/ Includes 11 chinook reported in statistical week 34.

Includes 2 chinook reported in statistical week 35.

Includes 19 chinook reported in statistical week 36.

5/ Includes 13 chinook reported in statistical week 33.

6/ Includes 33 chinook reported in statistical week 34.

Table 8. Purse seine harvest of chinook salmon by district and statistical week, 1983. Dash (-) indicates fishery closed.

Stat. Week	Inclusive Dates	District												Total
		101	102	103	104	105	106	107	109	110	112	113	114	
28	03 Jul-09 Jul	0	-	-	2,953	-	-	-	-	-	-	-	-	2,953
29	10 Jul-16 Jul	40	0	-	1,018	-	-	-	-	63	-	-	-	1,121
30	17 Jul-23 Jul	102	18	-	1,172	-	-	-	-	83	179	23	-	1,377
31	24 Jul-30 Jul	130	15	-	1,712	-	-	-	24	94	121	361	113	2,370
32	31 Jul-06 Aug	49	10	0	852	-	0	-	4	21	60	1,019	16	2,031
33	07 Aug-13 Aug	27	0	86	1,381	1	2	6	8	-	75	331	-	1,917
34	14 Aug-20 Aug	28	28	24	539	0	7	0	0	-	12	120	-	758
35	21 Aug-27 Aug	18	5	30	501	15	-	0	31	-	8	3	-	611
36	28 Aug-03 Sep	2	13	0	-	0	-	0	1	-	0	0	-	16
37	04 Sep-10 Sep	-	-	-	-	-	-	-	-	-	-	-	-	0
38	11 Sep-17 Sep	-	1	-	-	-	-	-	-	-	-	-	26	27
District Total		396	90	140	10,128	16	9	6	68	115	422	2,013	178	13,581

District 113. The 1983 harvest was only 43% of the 1982 record high catch and only slightly above the 1971-1982 average catch of 12,407. The catches of chinook salmon by the seine fleet is strongly related to catches of pink salmon (ADF&G 1986).

Average weight of fish tended to be highest in the Southern Districts and lowest in the Northern Inside districts (See Appendix Table 16).

Gillnet. The gillnet catch of 4,485 fish (Table 9) was reported primarily from Districts 115 and 101. Regardless of district, more fish were caught during the first half of the season. Catches were near the long term average in Districts 101 and 115, slightly below average in District 106, and extremely low for Districts 108 and 111 (McBride and Wilcock 1983). Average weights varied considerably between weeks and districts (Appendix Table 17). The average weights were highest in District 101 and lowest in District 115. A seasonal decline in average weights is observed in District 101 with the opposite trend seen in District 115.

Trap. The four fish traps operating in the Annette Island Fishery Reserve caught 194 chinook salmon (Table 10). This is 64% less than the 1982 catch. Most of these fish (175, 84.5%) were harvested in July.

Subsistence. The Chilkat River set net catch of 35 fish (Staska, personnel communication) was the only reported domestic subsistence harvest in South-eastern Alaska.

Canadian In-River Gillnet. The harvest of 2,108 fish in the Stikine River accounted for most of the Canadian catch (Table 11), of which slightly over half were taken by upper river subsistence fishermen. Significant catches on the Stikine occurred from mid-June to mid-July. The lower river fishery took slightly more large fish than small (See Methods) while large fish were taken exclusively by up-river commercial fishermen and predominated in up-river subsistence catches. In the Taku River catches were significant the last two weeks of June and the first week of July.

In the Taku River the large fish catch was similar to previous years (1979-1982) while no statistics for small fish exist prior to 1983. In the Stikine River, both lower and upper river commercial catches were similar to previous years (1979-1982) but subsistence catches were the largest ever (since 1972) reported.

Sport. The sport catch was an estimated 22,321 fish, Table 12, (See Mills 1984). The largest catches occurred near Ketchikan and Juneau. Salmon derbies held in May and June in Haines, Petersburg, Wrangell, Sitka, and Ketchikan target on chinook salmon.

Age, Sex, and Size Data:

Age and size statistics are presented by area and period for the troll fishery and by district for the seine and gillnet fisheries. Age, size, and sex statistics are also presented for the Canadian Transboundary River fisheries and each sport fishery sampled.

Table 9. Gillnet harvest of chinook salmon by district and statistical week, 1983. Dash (-) indicates fishery closed.

Stat. Week	Inclusive Dates	District					Total
		101	106	108	111	115	
25	12 Jun-18 Jun	4	-	-	-	-	4
26	19 Jun-25 Jun	292	25	-	138	39	494
27	26 Jun-02 Jul	400	126	-	215	84	825
28	03 Jul-09 Jul	150	99	-	182	258	689
29	10 Jul-16 Jul	61	14	-	41	256	372
30	17 Jul-23 Jul	112	44	-	15	208	379
31	24 Jul-30 Jul	80	25	-	112	302	519
32	31 Jul-06 Aug	65	3	-	96	224	388
33	07 Aug-13 Aug	19	49	-	24	166	258
34	14 Aug-20 Aug	9	12	0	16	44	81
35	21 Aug-27 Aug	23	25	6	16	103	173
36	28 Aug-03 Sep	17	22	7	19	310	375
37	04 Sep-10 Sep	18	19	18	12	19	86
38	11 Sep-17 Sep	4	18	14	1	46	83
39	18 Sep-24 Sep	10	4	2	1	11	28
40	25 Sep-01 Oct	-	82	0	-	35	117
41	02 Oct-08 Oct	-	-	-	-	13	13
42	09 Oct-15 Oct	-	-	-	-	1	1
District Total		1,264	567	47	888	2,119	4,885

Table 10. Commercial trap harvest of chinook salmon on the Annette Island Indian Fishery Reserve, Southeast Alaska District 101-28, 1983.

cab#2, trap. 123

Stat. Week	Inclusive Dates	Catch	Poundage	Average Weight
28	03 Jul-09 Jul	50	1,278	25.6
29	10 Jul-16 Jul	74	1,474	19.9
30	17 Jul-23 Jul	40	850	21.3
31	24 Jul-30 Jul	11	200	18.2
32	31 Jul-06 Aug	7	135	19.3
33	07 Aug-13 Aug	7	144	20.6
34	14 Aug-20 Aug	4	54	13.5
35	21 Aug-27 Aug	1	31	31.0
Total		194	4,166	21.5

Table 11. Canadian in-river harvest of chinook salmon from the Taku and Stikine. Dash (-) indicates fishery closed.

Stat. Week	Inclusive Dates	Stikine River												Canadian Total	
		Taku Commercial			Lower River Commercial			Upper River Commercial			Upper River Subsistence				
		Large	Small	1/ Total	Large	Small	Total	Large	Small	Total	Large	Small	Total		
		-	-	-	-	-	-	-	-	-	26	0	26	26	
24	05 Jun-11 Jun	-	-	-	-	-	-	-	-	-	26	0	26	26	
25	12 Jun-18 Jun	35	100	135	82	53	137	12	0	12	58	6	64	213	
26	19 Jun-25 Jun	42	124	166	106	69	175	62	0	62	144	18	162	399	
27	26 Jun-02 Jul	39	98	137	98	100	198	0	0	0	149	74	223	421	
28	03 Jul-09 Jul	19	50	69	112	115	227	0	0	0	201	104	305	532	
29	10 Jul-16 Jul	9	20	29	34	56	110	0	0	0	172	7	179	289	
30	17 Jul-23 Jul	7	7	14	15	15	30	1	0	1	44	6	50	81	
31	24 Jul-30 Jul	3	1	4	3	11	14	0	0	0	18	0	18	32	
32	31 Jul-06 Aug	0	0	0	11	6	17	0	0	0	26	0	26	43	
33	07 Aug-13 Aug	0	0	0	1	1	2	-	-	0	0	0	0	10	
34	14 Aug-20 Aug	0	0	0	1	1	2	-	-	0	49	0	49	51	
35	21 Aug-27 Aug	0	0	0	0	0	0	-	-	0	1	0	1	1	
36	28 Aug-03 Sep	0	0	0	0	1	1	-	-	0	0	0	0	1	
37	04 Sep-10 Sep	0	0	0	0	0	0	-	-	0	-	0	0	0	
38	11 Sep-17 Sep	-	-	0	3	0	3	-	-	0	-	0	0	3	
39	18 Sep-24 Sep	-	-	0	6	0	6	-	-	0	-	0	0	6	
40	25 Sep-01 Oct	-	-	0	0	0	0	-	-	0	-	0	0	0	
Total		154	400	554	492	430	922	75	0	75	896	215	1,111	2,108	
														2,662	

1/ Canadian data provided by size class, small fish were defined as less than 5 pounds, less than 500 mm, and aged .2 or less.

Table 12. Sport harvest of chinook salmon in Southeastern Alaska, 1983¹.

Location	Large Chinook (total length > 28 in)	Small Chinook (total length < 28 in)	Total
Ketchikan	7,762	206	7,968
Prince of Wales	1,520	23	1,543
Petersburg/Wrangell	3,232	100	3,332
Juneau	5,263	168	5,431
Sitka	2,070	38	2,108
Haines	1,395	31	1,426
Glacier Bay	147	10	157
Yakutat	325	31	356
Total	21,714	607	22,321

¹ From Mills (1984)

Troll. Most (64%) of the fish harvested during the 13 March to 14 April period of the winter troll fishery were age 0. (fall run) (Table 13, Figure 2). The Southern Outside area had the highest proportion of fish aged 0. (73%) and the Northern Inside area had the lowest (44%). Fish aged 0.3 were most common in catches at 40% followed by fish aged 0.4 (24%), 1.3 (17%), and 1.4 (14%). The incidence of fish aged 1.4 was highest in the northern areas.

The summer troll catches were predominated by fish aged 0.3, which comprised 54% of the Northern and Southern Outside area catches and 38% and 32%, respectively, of the Northern and Southern Inside area catches (Table 14). Fish aged 0.4, 1.3, 0.2, and 1.2 also contributed significantly to the harvest. The incidence of fish aged 0. was higher in the outside areas (80%), than the inside areas, 59% for Southern Inside and 56% for Northern Inside (Figure 2).

In the summer troll fishery, sufficient samples were available to examine the data for temporal trends in all but the Northern Inside area. In all three areas, the incidence of two-ocean age fish increased through time. Fish aged 1.2 were more abundant than fish aged 0.2 during the early weeks, however, by the end of the summer fishery, fish aged 0.2 were more abundant. In the southern areas the incidence of three-ocean aged fish decreased through time while in the Northern Outside area no significant temporal trend existed.

The incidence of four-ocean age fish decreased through time in all areas, but only slightly so in the Southern Outside area. In all areas the decrease was more pronounced in fish aged 1.4 than for fish aged 0.4.

Examination of average length by age data reveals little consistent size differences between areas or through time (Table 15). For fish of a given ocean age, those aged 1. were usually larger than those aged 0.

Seine. The purse seine harvest was dominated by fish aged 0.3 (41%) and 0.2 (34%) (Table 16). In total, fish aged 0. comprised 89.5% of the harvest. Age 0. fish comprised a higher proportion of the catch in outside versus inside districts. The incidence of age 0.1 fish was highest in southern inside districts. The mean length of age 1. fish tended to be larger than age 0. fish for a given ocean age (Table 17). Fish aged 0.2 were smaller in inside versus outside districts. The incidence of age 0.1 fish was highest in southern inside districts.

Gillnet. Two-ocean age fish dominated the gillnet harvest with age 1.2 comprising 48% and age 0.2 comprising 27% (Table 18). The incidence of fish aged 0. was highest in Districts 101, 106, and 108 while the incidence of fish aged 1. was highest in Districts 111 and 115. The mean length of fish aged 0.2 and 1.2 caught in Districts 111 and 115 were consistently smaller than fish of the same age caught in Districts 101 and 106 (Table 19).

Canadian In-River Gillnet. Virtually all chinook salmon harvested in the Stikine and Taku Rivers were aged 1., 95% and 99% respectively (Table 20). The average ocean age was less for fish harvested in the Taku River (2.3 years) than for the Stikine River (2.6 years). In each river, fish aged

Table 13. Age composition of the winter troll fishery harvest of chinook salmon by area.

Area	Sample Size	Statistic	Brood Year and Age Class										Catch 2/	
			1980		1979		1978		1977		1976			
			0.2	0.3	1.2	0.4	1.3	0.5	1.4	2.3	1.5			
Northern Outside	659	Percent Number Fish		44.3 2,596	1.4 80	26.1 1,528	16.1 942	0.2 9	11.7 685	0.2 9	0.2 9		5,858	
Southern Outside	55	Percent Number Fish		38.2 634	10.9 181	34.5 574	12.7 212		3.6 60				1,661	
Northern Inside	426	Percent Number Fish	0.5 15	29.1 951	2.3 77	14.3 468	22.5 736	0.2 7	30.3 989		0.7 23		3,266	
Southern Inside	118	Percent Number Fish	1.7 37	43.2 941	5.9 129	22.0 480	17.8 387	1.7 37	7.6 166				2,177	
Total	1,258	Percent Number Fish	0.4 52	39.5 5,122	3.6 467	23.5 3,050	17.6 2,277	0.4 53	14.7 1,900	0.1 9	0.2 32		12,962	
		Std. Error (No. Fish)	28	200	92	178	152	29	124	9	16			

1/ Includes catches from 13 March to 14 April 1983 only.

2/ District 114 is included in the Northern Inside area.

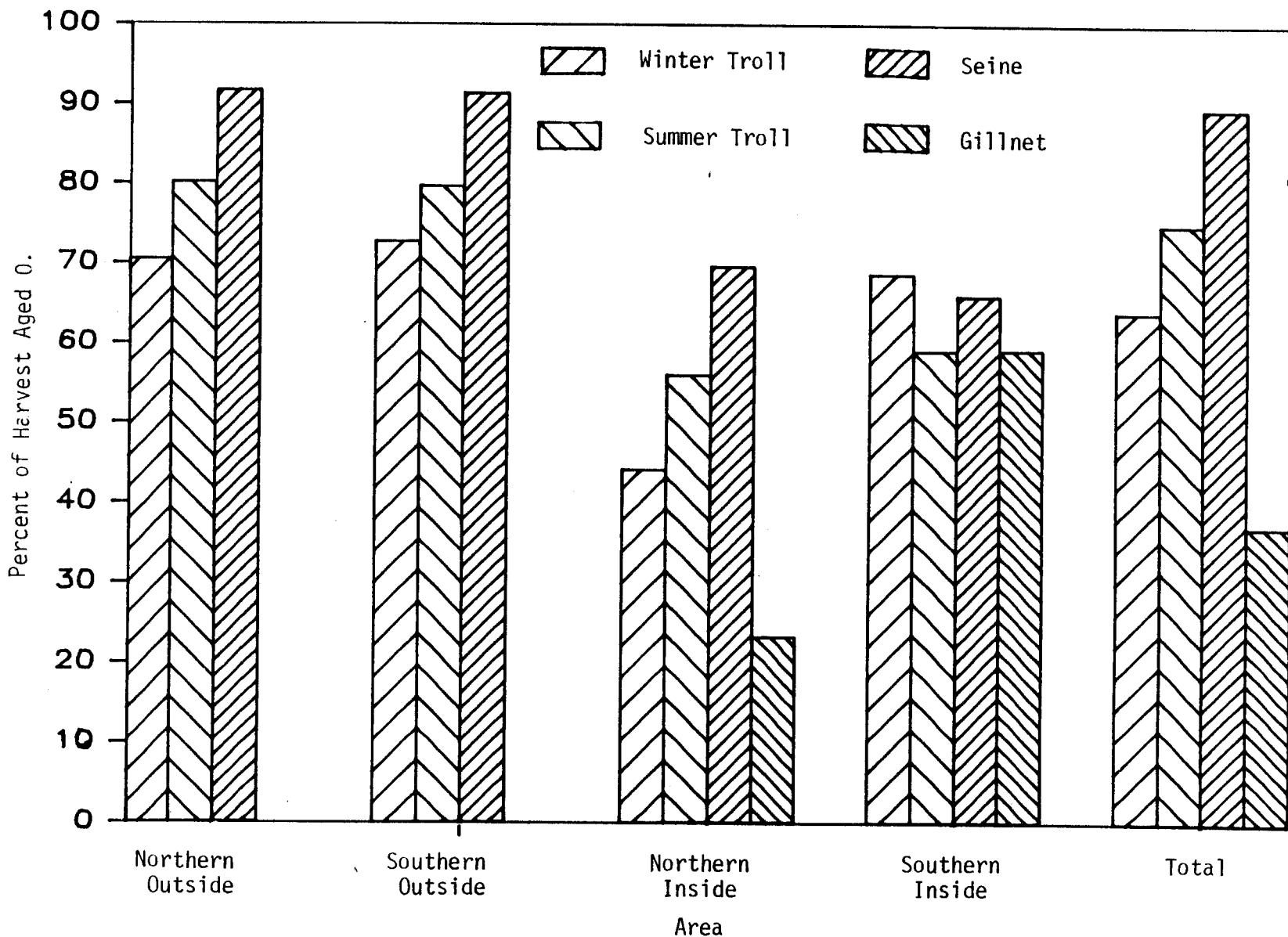


Figure 2. Percent fish aged 0. in the Southeastern Alaska troll, seine, and gillnet harvests, 1983.

Table 14. Age composition of the summer troll fishery harvest of chinook salmon by area and period, 1983.

Area	Inclusive Dates	Sample Size	Statistic	Brood Year and Age Class										Catch		
				1981			1980			1979			1978			
				0.1	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5		
Northern Outside (Stat Wk. 21)	15 May-21 May	677	Percent Number Fish	1.0 81	61.3 4,774	3.1 242	13.1 1,024	14.2 1,105	0.4 35	0.6 46	6.2 483				7,790	
	22 May-28 May (Stat Wk. 22)	821	Percent Number Fish	0.5 74	51.5 7,825	3.9 592	22.3 3,386	13.2 1,998	0.1 19	1.0 148	7.6 1,147				15,189	
	29 May-04 Jun (Stat Wk. 23)	729	Percent Number Fish	2.9 319	54.2 5,996	4.8 531	14.1 1,564	14.3 1,579	0.1 15	0.7 76	8.9 987				11,067	
	05 Jun-07 Jun (Stat Wk. 24)	874	Percent Number Fish	1.6 359	50.9 11,419	6.2 1,385	20.3 4,541	13.5 3,027		0.7 154	6.6 1,488	0.2 51			22,424	
	01 Jul-09 Jul (Stat Wk. 27-28)	655	Percent Number Fish	7.9 2,369	56.9 16,992	6.0 1,777	20.6 6,150	6.6 1,958		0.8 228	1.1 319	0.2 46			29,839	
	10 Jul-16 Jul (Stat Wk. 29)	683	Percent Number Fish	6.4 799	1.5 181	48.3 5,996	11.9 1,472	15.1 1,871	14.6 1,817	0.7 91	1.3 164	0.1 18			12,409	
	17 Jul-23 Jul (Stat Wk. 30)	646	Percent Number Fish	10.7 1,556	0.3 45	60.1 8,747	5.6 812	18.6 2,705	4.2 609			0.6 90			14,564	
	24 Jul-30 Jul (Stat Wk. 31)	900	Percent Number Fish	0.1 16	13.4 1,995	0.1 16	61.2 9,088	7.1 1,055	11.7 1,732	5.1 759	0.7 99	0.6 82			14,842	
	31 Jul-04 Aug (Stat Wk. 32)	857	Percent Number Fish	21.8 4,046	0.7 20	52.4 9,714	11.3 2,099	8.8 1,623	5.1 952	0.2 43	0.1 22	0.1 22			18,541	
Area Total		6,842	Percent	<.1	7.6	0.2	54.2	6.8	16.8	9.4	<.1	0.6	3.3	0.1		
15 May-04 Aug (Stat Wk. 21-32)			Number Fish	16	11,598	262	80,551	9,965	24,596	13,804	69	885	4,782	137	146,665	
			Std. Error (No. Fish)	399	60	854	414	672	505	31	148	305	60			

-Continued-

Table 14. Age composition of the summer troll fishery harvest of chinook salmon by area and period, 1983
 (continued).

Area	Inclusive Dates	Sample Size	Statistic	Brood Year and Age Class													
				1981			1980			1979			1978			1977	
				0.1	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5	Catch		
Southern Outside	15 May-04 Jun (Stat Wk. 21-23)	981	Percent Number Fish	4.6 760	55.5 9,188	9.3 1,537	15.0 2,483	10.9 1,807	0.2 34	4.5 743	0.1 17	16,569					
	05 Jun-09 Jul (Stat Wk. 24-28)	735	Percent Number Fish	7.9 907	0.3 31	55.2 6,347	8.8 1,016	14.0 1,610	7.9 907	0.5 63	0.4 47	4.8 547	0.1 16	11,491			
	10 Jul-23 Jul (Stat Wk. 29-30)	567	Percent Number Fish	0.5 29	25.2 1,402	52.0 2,891	4.2 235	15.7 872	1.9 108	0.2 10	0.2 10	0.2 10	0.2 10	0.2 10	5,557		
	24 Jul-04 Aug (Stat Wk. 31-32)	516	Percent Number Fish	26.2 862	0.2 6	46.3 1,527	8.7 287	13.8 453	3.5 115	0.2 6	1.2 38	0.2 38	0.2 38	0.2 38	3,294		
125-	Area Total	2,799	Percent	0.1	10.7	0.1	54.1	8.3	14.7	8.0	0.2	0.3	3.6	0.1			
	15 May-04 Aug (Stat Wk. 21-32)		Number Fish	29	3,931	37	19,953	3,075	5,418	2,937	63	97	1,338	33	36,911		
			Std. Error (No. Fish)	17	199	23	364	205	259	205	31	38	143	23			
	Northern Inside	Area Total	1,077	Percent	9.6	0.1	37.7	15.5	8.4	21.6	0.1	0.4	6.5	0.2			
Inside	15 May-04 Aug (Stat Wk. 21-32)		Number Fish	2,238	21	8,826	3,631	1,957	5,064	21	87	1,522	44	23,411			
			Std. Error (No. Fish)	210	21	346	258	198	294	21	43	176	31				
Southern Inside	15 May-09 Jul (Stat Wk. 21-28)	653	Percent Number Fish	0.2 33	12.1 2,589	0.3 66	32.8 7,011	21.9 4,685	9.2 1,966	18.4 3,932	0.2 33	0.2 33	4.7 1,016	0.2 33	21,397		
	10 Jul-04 Aug (Stat Wk. 29-32)	915	Percent Number Fish	34.3 3,987	1.8 203	29.4 3,416	24.4 2,831	4.0 469	4.9 572			1.2 139		11,617			
	Area Total	1,568	Percent	0.1	19.9	0.8	31.6	22.8	7.4	13.6	0.1	0.1	3.5	0.1			
	15 May-04 Aug (Stat Wk. 21-32)		Number Fish	33	6,576	269	10,427	7,516	2,435	4,504	33	33	1,155	33	33,014		
Total	15 May-04 Aug. (Stat Wk. 21-32)	12,286	Percent	<.1	10.1	0.2	49.9	10.1	14.3	11.0	0.1	0.5	3.7	0.1			
			Number Fish	78	24,343	589	119,757	24,187	34,406	26,309	186	1,102	8,797	247	240,001		
			Std. Error (No. Fish)	37	593	96	1,080	654	789	704	49	162	422	79			

Table 15. Length at age for chinook salmon caught in the summer troll fishery, by area and period, 1983.

Area	Inclusive Dates	Statistic	Brood Year and Age Class										
			1981		1980		1979		1978		1977		
			0.1	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5
Northern Outside	15 May-21 May (Stat. Wk. 21)	Mean Length	660		737	673	852	756	714	970	859		
		Standard Error	9		2	9	7	7	18	48	15		
		Sample Size	7		415	21	89	96	3	4	42		
	22 May-28 May (Stat. Wk. 22)	Mean Length	632		756	680	865	769	705	905	891		
		Standard Error	10		3	7	4	7		20	9		
		Sample Size	4		423	32	183	108	1	8	62		
	29 May-4 June (Stat. Wk. 23)	Mean Length	655		733	682	854	760	630	891	869		
		Standard Error	6		3	7	6	8		19	8		
		Sample Size	21		395	35	103	104	1	5	65		
-26-	5 June-8 June Stat. Wk. 24)	Mean Length	680		752	686	855	802		910	875	872	
		Standard Error	23		3	6	4	7		12	10	9	
		Sample Size	14		445	54	177	118		6	58	2	
	1 July-9 July (Stat. Wks. 27 and 28)	Mean Length	648		770	676	876	782		906	913	1010	
		Standard Error	4		3	7	8	10		24	25		
		Sample Size	52		373	39	135	43		5	7	1	
	10 July-16 July (Stat. Wk. 29)	Mean Length	661	628	771	669	874	765		913	872	945	
		Standard Error	4	9	3	5	6	7		32	33		
		Sample Size	44	10	330	81	103	100		5	9	1	
	17 July-23 July (Stat. Wk. 30)	Mean Length	669	715	772	682	886	782			878		
		Standard Error	6	30	4	7	5	13			51		
		Sample Size	69	2	388	36	120	27				4	
	24 July-30 July (Stat. Wk. 31)	Mean Length	690	674	640	777	687	878	791		960	897	
		Standard Error	3		3	5	6	10		25	45		
		Sample Size	1	121	1	551	64	105	46		6	5	
	31 July-4 Aug. (Stat. Wk. 32)	Mean Length	663	620	777	695	891	784		943	845	905	
		Standard Error	3		3	5	6	13		13			
		Sample Size	187	1	449	97	75	44		2	1	1	

-Continued-

Table 15. Length at age for chinook salmon caught in the summer troll fishery, by area and period, 1983
 (continued).

Area	Inclusive Dates	Statistic	Brood Year and Age Class															
			1981			1980			1979			1978			1977		1976	
			0.1	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5					
Southern Outside	15 May-4 June (Stat. Wk. 21 to 23)	Mean Length	647			741	674	837	781		885	897	820					
		Standard Error	5			3	5	8	7		25	12						
		Sample Size	45			544	91	147	107		2	44	1					
	5 June-July 9 (Stat. Wk. 24 to 28)	Mean Length	649	554	753	662	861	803	673	918	914	914	960					
		Standard Error	5	59	3	4	7	10	31	116	12							
		Sample Size	58	2	406	65	103	58	4	3	35	1						
	10 July-23 July (Stat. Wk. 29 to 30)	Mean Length	582	655		780	670	897	877		900	905						
		Standard Error	116	59		4	9	6	17									
		Sample Size	3	143		295	24	89	11		1	1						
Northern Inside	24 July-Aug. 4 (Stat. Wk. 31 to 32)	Mean Length	653	652	775	713	874	833		985	920							
		Standard Error	3		4	11	7	12			19							
		Sample Size	135	1	239	45	71	18		1	1	6						
	15 May-Aug. 4 (Stat. Wks. 21 to 32)	Mean Length	661	662	721	668	886	756	654	950	866	798						
		Standard Error	4		5	4	4	4		55	9	53						
		Sample Size	103	1	406	167	90	233	1	4	70	2						
	15 May-July 9 (Stat. Wks. 21 to 28)	Mean Length	625	650	444	737	646	874	770		1052	880	952					
		Standard Error	5	2	6	3	10	7			13	1						
		Sample Size	1	79	2	214	143	60	120		1	31						
Southern Inside	10 July-Aug. 4 (Stat. Wks. 29 to 32)	Mean Length	658	614	752	665	873	787	705			871						
		Standard Error	2	14	4	3	26	10			11							
		Sample Size	314	16	269	223	37	45	1		11							

Table 16. Age composition of the purse seine harvest of chinook salmon by area, 1983.

Area	District	Sample Size	Statistic	Brood Year and Age Class												Total Catch	
				1981		1980		1979		1978		1977		1976			
				0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	0.5	1.4	2.3	1.5		
Northern Outside	113, 114	156	Percent	4.3	1.3	53.9	2.6	30.8	3.9	2.6	0.6					100.0	
			Number Fish	98	28	1,181	56	674	84	56	14					2,191	
Southern Outside	103, 104	773	Percent	4.3	0.7	28.5	0.8	46.2	4.3	11.8	2.3	0.4	0.4	0.1	0.1	100.0	
			Number Fish	463	67	2,922	80	4,742	438	1,209	239	40	40	13	13	10,268	
Northern Inside	109, 110, 112	23	Percent			52.2	8.7	13.0	17.4	4.4	4.4					100.0	
			Number Fish			316	53	79	105	26	26					605	
Southern Inside	101, 102, 105, 106, 107	102	Percent	26.5		28.4	18.6	7.8	6.9	2.9	6.9			2.0		100.0	
			Number Fish	137		148	96	41	35	15	35			10		517	
Total		1,054	Percent	5.2	0.7	33.6	2.1	40.8	4.9	9.6	2.3	0.3	0.4	0.1	0.1	100.0	
			Number Fish	700	95	4,567	285	5,536	662	1,306	314	40	50	13	13	13,581	
			Std. Error (No. Fish)	88	36	200	60	206	96	125	65	23	24	13	13		

Table 17. Length at age for chinook salmon caught in the purse seine fishery by area, 1983.

Districts	Statistic	Brood Year and Age Class											
		1981		1980		1979		1978		1977		1976	
		0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	0.5	1.4	2.3	1.5
113, 114	Mean Length	429	382	602	408	779	611	892	665				
	Standard Error	20	4	8	21	10	15	28					
	Sample Size	7	2	84	4	48	6	4	1				
103, 104	Mean Length	404	337	629	515	796	693	908	869	942	934	710	375
	Standard Error	8	20	6	36	3	15	7	20	30	39		
	Sample Size	35	5	220	6	357	33	91	18	3	3	1	1
109, 110, 112	Mean Length			545	389	634	572	843					
	Standard Error			18	64	32	24						
	Sample Size			12	2	3	4	1					
101, 102, 105	Mean Length	393		532	459	716	632	772	797		1020		
106, 107	Standard Error	9		29	31	103	41	53	18		60		
	Sample Size	27		29	19	8	7	3	8		2		

Table 18. Age composition of the gillnet harvest of chinook salmon by district, 1983.

District	Sample Size	Statistic	Brood Year and Age Class										Total Catch	
			1981		1980		1979		1978		1977			
			0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	1.4			
101	119	Percent Number Fish	1.7 21	0.0 0	37.8 478	1.7 21	16.8 212	31.9 404	3.4 43	5.0 64	1.7 21		1,264	
106	27	Percent Number Fish	3.7 21	0.0 0	51.9 294	11.1 63	3.7 21	22.2 126	0.0 0	7.4 42	0.0 0		567	
108	17	Percent Number Fish	5.9 3	0.0 0	35.3 16	5.9 3	5.9 3	41.1 19	0.0 0	0.0 0	5.9 3		47	
111	183	Percent Number Fish	0.0 0	0.6 5	11.5 102	4.4 39	6.6 58	57.3 509	1.6 15	9.8 87	8.2 73		888	
115	191	Percent Number Fish	1.6 33	0.0 0	19.3 411	6.3 133	3.7 78	61.2 1,298	0.0 0	7.9 166	0.0 0		2,119	
Total	537	Percent Number Fish	1.6 78	0.1 5	26.6 1,301	5.3 259	7.6 372	48.2 2,356	1.2 58	7.3 359	2.0 97		4,885	
		Std. Error (No. Fish)	32	5	102	55	58	109	23	60	24			

Table 19. Length at age for chinook salmon caught in the gillnet fisheries, by district, 1983.

District	Statistic	Brood Year and Age Class									
		1981		1980		1979		1978		1977	
		0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	1.4	
101	Mean Length	430		609	503	745	624	967	786	908	
	Standard Error	25		8	38	24	7	89	27	28	
	Sample Size	2		45	2	20	38	4	6	2	
106	Mean Length	380		641	547	856	663		710		
	Standard Error			11	67		27		16		
	Sample Size	1		14	3	1	6		2		
108	Mean Length	480		604	635	602	699			865	
	Standard Error			8			10				
	Sample Size	1		6	1	1	7			1	
111	Mean Length		375	554	561	562	578	808	711	867	
	Standard Error			10	28	80	6	45	21	11	
	Sample Size		1	21	8	12	105	3	18	15	
115	Mean Length	445		585	594	653	586		730		
	Standard Error	53		10	19	24	4		20		
	Sample Size	3		37	12	7	117		15		

Table 20. Age composition of the Canadian commercial harvest of chinook salmon on the Stikine River and Taku Rivers, 1983.

River/ Stream Number	Sex	Sample Size	Statistic	Brood Year and Age Class									
				1980		1979		1978		1977		1976	
				0.2	1.1	0.3	1.2	0.4	1.3	1.4	1.5	2.4	Total
Stikine 108-40-015	Male	271	Percent	0.7	10.0	0.4	38.4	0.7	12.2	4.8			67.2
			Number Fish	7	99	4	383	7	121	48			670
			Percent	0.7	1.8	0.7	1.1	13.3	14.4	0.4	0.4		32.8
	Female		Number Fish	7	18	7	11	132	143	4	4		327
			Percent	0.7	10.7	2.2	39.1	1.8	25.5	19.2	0.4	0.4	100.0
			Number Fish	7	107	22	390	18	254	191	4	4	997
	Total		Standard Error	85	58	66	47	67	53	55			
			Percent	0.7	8.1		61.0	0.7	5.1	5.1			80.9
			Number Fish	4	45		338	4	29	29			448
Taku 111-32-032	Male	136	Percent				2.9		8.8	7.4			19.1
			Number Fish				16		49	41			106
			Percent	1.3	14.6		115.1	1.3	25.1	22.5			100.0
	Female		Number Fish	4	45		354	4	77	69			554
			Standard Error			62			57	58			

1.2 were the most common followed by age groups 1.3, 1.4 and 1.1. Available samples indicate that 73% of the Taku River harvest was one and two-ocean age fish, the same as the reported number of jacks harvested (see Table 11). In the Stikine, the 51% incidence of one and two-ocean age fish is similar to the proportion of jacks reported in the lower river commercial fishery but not for the other upper river commercial and subsistence fisheries.

Mean lengths were similar for Stikine and Taku River fish (Table 21). Three and four-ocean males were larger, on the average, than females.

Sport. Fish aged 1. dominated the sampled sport catches (Table 22), comprising 96% of the Haines derby catch, better than 82% of the Juneau, Petersburg, and Wrangell creel samples, 76% of the Juneau derby samples, and 68% of the Ketchikan creel samples. The late May, early June Haines derby targets on maturing fish returning to the Chilkat River, consequently, the incidence of four and five ocean fish was the highest for this fishery. By contrast, no four or five ocean fish were harvested in the Juneau derby, held in early August after the maturing Alaskan fish have entered their natal streams.

The Juneau, Petersburg, Wrangell, and Ketchikan area sport fisheries harvest a significant fraction of fish aged 0. that had spent two years at sea. As in the commercial catches, fish aged 1. tended to be larger at a given age than fish aged 0. and males tended to be larger than females (Table 23).

Escapement Statistics

There are 34 known chinook salmon producing rivers in Southeastern Alaska, three are considered major producers with a current or potential production of 10,000 or more fish in each run, 8 are considered medium producers (1,500 to 10,000 fish), and 23 are considered minor producers (less than 1,500 fish) (A.D.F.&G. 1982). Nine index rivers are surveyed annually (A.D.F.&G., Sport Fish Division) to obtain peak escapement estimates of two-ocean or older fish. The nine index systems include the three major producers (Alsek, Taku, and Stikine), five medium producers (Situk, Unuk, Chickamin, Blossom, and Keta), and one minor producer (King Salmon).

Peak escapement counts for all rivers surveyed are presented along with estimates of the total escapement to the nine index systems and the entire region. Age, sex, and size composition data for 17 wild stock samples and 4 hatchery runs is presented.

Numbers of Fish:

Surveys by aerial (fixed wing and helicopter), foot, boat, and weir provided indices of peak escapement for 49 spawning areas (Table 24). Weirs were used to count the escapements to four natural runs (Andrew Creek, King Salmon River, Little Trapper Lake and Situk River)(Appendix Tables 18 to 21) and all four hatcheries [Deer Mountain (Ketchikan Creek), Crystal Lake (Crystal Creek)(Appendix Table 22), Little Port Walter (Sashin Creek), and Snettisham]. The survey data for un-weired systems must be used with

Table 21. Length at age (by sex) for chinook salmon caught in the Canadian commercial gillnet fisheries on the Stikine and Taku Rivers, 1983.

River/ Stream Number	Number Sex	Statistic	Brood Year and Age Class								
			1980		1979		1978		1977		1976
			0.2	1.1	0.3	1.2	0.4	1.3	1.4	1.5	2.4
Stikine 108-40-015	Males	Mean Length	630	499	800	551	946	840	929		
		95x C.I.	60	10		6	56	19	17		
		Sample Size	2	27	1	104	2	33	13		
	Females	Mean Length			507	790	609	827	811	876	895
		95x C.I.			18	36	15	55	14	8	930
		Sample Size			2	5	2	3	36	39	1
	Taku 111-32-032	Mean Length	612	410		551	889	717	925		
		95x C.I.			13		7	64	15		
		Sample Size	1	11		83	1	7	7		
	Females	Mean Length				623		799	866		
		95x C.I.				103		25	22		
		Sample Size				4		12	10		

Table 22. Age composition of chinook salmon from select Southeastern Alaska sport fisheries, 1983.

Sample Description	Sex	Statistic 1/	Brood Year and Age Class														
			1981			1980			1979			1978			1977		
			0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5	Total		
Heines Derby (28 May-29 May, 5 June-6 June)	Male	No. Sampled					1		5		9		19	5	40		
		Percent					1.5		1.5	7.4		13.2		27.9	7.4	58.8	
		Number Fish					1		1	7		12		26	7	54	
	Female	No. Sampled					1			1		5		20	1	28	
		Percent					1.5			1.5		7.4		29.4	1.5	41.2	
		Number Fish					1			1		7		27	1	38	
	Total	No. Sampled					2			7		18		48	7	83	
		Percent					2.4			1.2	8.4		21.7		57.8	8.4	100.0
		Number Fish					2			1	8		20		53	8	92
		Standard Error					2			3		4		5	3		
Juneau Derby (5 Aug.-6 Aug.)	Male	No. Sampled					3		5	10		5				23	
		Percent					3.3		5.6	11.1		5.6				25.6	
		Number Fish					29		48	97		48				223	
	Female	No. Sampled					1		11	25		1	29			67	
		Percent					1.1		12.2	27.8		1.1	32.2			74.4	
		Number Fish					10		107	242		10	281			649	
	Total	No. Sampled					4		18	38		1	34			95	
		Percent					4.2		18.9	40.0		1.1	35.8			100.0	
		Number Fish					37		165	349		9	312			872	
		Standard Error					18		35	44		9	43				
Juneau Creel (12 Mar.-8 Sept.)	Male	No. Sampled					7		9	37		2	46		20	121	
		Percent					2.3		3.0	12.3		0.7	15.3		6.6	40.2	
		Number Fish					126		162	668		36	830		361	2,183	
	Female	No. Sampled					2		22	33		1	81		1	40	
		Percent					0.7		7.3	11.0		0.3	26.9		0.3	13.3	
		Number Fish					36		397	595		18	1,461		18	722	
	Total	No. Sampled					11		35	80		3	138		1	65	
		Percent					3.3		10.5	24.0		0.9	41.4		0.3	19.5	
		Number Fish					179		571	1,305		49	2,251		16	1,060	
		Standard Error					53		91	127		28	147		16	118	

-Continued-

Table 22. Age composition of chinook salmon from select Southeastern Alaska sport fisheries, 1983 (continued).

Sample Description	Sex	Statistic 1/	Brood Year and Age Class													
			1981		1980		1979		1978			1977		1976		
			0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5	Total	
Peterburg and Wrangell Creel (18 Apr.-6 July)	Male	No. Sampled			1	1		7	6	2	19		21	1	58	
		Percent			0.9	0.9		6.3	5.4	1.8	17.0		18.8	0.9	51.8	
		Number Fish			30	30		208	179	60	565		625	30	1,726	
	Female	No. Sampled			1			2	3	6	22		20		54	
		Percent			0.9			1.8	2.7	5.4	19.6		17.9		48.2	
		Number Fish			30			60	89	179	655		595		1,607	
	Total	No. Sampled			1	2		15	15	8	53		1	56	1	152
		Percent			0.7	1.3		9.9	9.9	5.3	34.9		0.7	36.8	0.7	100.0
		Number Fish			22	44		329	329	175	1,162		22	1,228	22	3,332
		Standard Error			22	31		81	81	61	129		22	131	22	
Ketchikan Creel (7 May-9 July)	Male	No. Sampled	2		2	3	22	34		26	1		7		97	
		Percent	1.0		1.0	1.5	11.3	17.4		13.3	0.5		3.6		49.7	
		Number Fish			82	123	899	1,389		1,062	41		286		3,964	
	Female	No. Sampled	3		5		19	16	6	40			9		98	
		Percent	1.5		2.6		9.7	8.2	3.1	20.5			4.6		50.3	
		Number Fish			204		776	654	245	1,634			368		4,004	
	Total	No. Sampled	5		10	8	46	70	10	80	1		19		249	
		Percent	2.0		4.0	3.2	18.5	28.1	4.0	32.1	0.4		7.6		100.0	
		Number Fish			320	256	1,472	2,240	320	2,560	32		608		7,968	
		Standard Error			99	89	196	227	99	236	32		134			

1/ Totals include unsexed fish.

Table 23. Size at age (by sex) for chinook salmon from select Southeastern Alaska sport fisheries, 1983¹.

Sample Description	Sex	Statistic ²	Brood Year and Age Class										1977		1976			
			1981			1980			1979			1978			1977		1976	
			0.1	1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	1.5				
Haines Derby (28 May-29 May, 5 June-6 June)	Male	Mean Length		521		902	639		776			974	1,004					
		Std. Error					55		89			65	70					
		Sample Size		1		1	5		9			19	5					
	Female	Mean Length		588			559		825			919	1,041					
		Std. Error						114				59						
		Sample Size		1			1		5			20	1					
	Total	Mean Length		555		902	629		788			943	993					
		Std. Error		34			55		95			67	74					
		Sample Size		2		1	7		18			48	7					
Juneau Derby (5 Aug.-6 Aug.)	Male	Mean Length		703		861	718		812			943	993					
		Std. Error		80		70	49		47			67	74					
		Sample Size		3		5	10		6			48	7					
	Female	Mean Length		640		768	697	870	768			919	1,041					
		Std. Error				76	58		56			59						
		Sample Size		1		11	25	1	29			20	1					
	Total	Mean Length		688		788	699	870	775			943	993					
		Std. Error		74		82	57		57			67	74					
		Sample Size		4		20	38	1	35			48	7					
Juneau Creel (12 Mar.-8 Sept.)	Male	Mean Length		676		791	717	967	809			980						
		Std. Error		35		18	7	33	10			18						
		Sample Size		7		9	37	2	46			20						
	Female	Mean Length		594		734	715	980	782			905	932					
		Std. Error		86		12	7		7			12						
		Sample Size		2		22	33	1	81			1	40					
	Total	Mean Length		653		770	714	971	794			905	951					
		Std. Error		27		9	5	20	6			10						
		Sample Size		11		35	80	3	138			1	65					
Peterburg Creel (3 May-6 July)	Male	Mean Length		400			784	765	950	879			869					
		Std. Error					26	77	10	28			71					
		Sample Size		1			5	3	2	11			13					
	Female	Mean Length		570				645	934	852			946					
		Std. Error						115	44	34			18					
		Sample Size		1				2	4	10			11					
	Total	Mean Length		400	570		784	728	939	868			905					
		Std. Error					26	32	28	19			35					
		Sample Size		1	1		5	6	6	24			27					
Wrangell Creel (18 Apr.-26 June)	Male	Mean Length		765			825	742		919			956	1,300				
		Std. Error					55	18		38			22					
		Sample Size		1		2	3		8			8	1					
	Female	Mean Length					815	790	883	827			978					
		Std. Error					5		8	19			15					
		Sample Size		2		1	2	12				9						
	Total	Mean Length		765			804	742	883	863			970	977	1,300			
		Std. Error					18	11	8	16			12					
		Sample Size		1		10	9	2	29			1	29	1				
Ketchikan Creel (7 May-9 July)	Male	Mean Length	528	745	503	889	741	1,079	881	840			1,076					
		Std. Error	172		25	18	29	10	64	21			34					
		Sample Size	2	2	3	22	34	4	26	1			7					
	Female	Mean Length	672	650		824	708	1,000	919				1,002					
		Std. Error	117		40		17	25	31	13			23					
		Sample Size	3	5		19	16	6	40				9					
	Total	Mean Length	615	668	521	852	730		908	840			1,033					
		Std. Error	91		26	67	17	8		11			20					
		Sample Size	5	10	8	46	70		80	1			19					

¹ Lengths measured from tip of snout to fork of tail.

² Totals include unsexed fish.

Table 24. Peak escapement estimates and weir counts for chinook salmon in Southeast Alaska and transboundary rivers, 1983. Abbreviations for types of surveys are: (A) aerial (fixed wing), (B) boat, (F) foot, (H) helicopter, and (W) weir.

River/ Tributary	Number					
Keta River	101-30-030	822	(H)	8/20	ADF&G	1/
Martin River	101-30-060	138	(F)	9/10	ADF&G	
Carrol River	101-45-078	18	(F)	8/31	ADF&G	
Ketchikan Creek	101-45-025	1,426 2/	(W)	9/23	ADF&G	
Wilson River	101-55-020	178	(B)	9/2	ADF&G	
Blossom River	101-55-040	589	(H)	8/20	ADF&G	
Big Goat Creek	101-60-030	22	(F)	9/3	ADF&G	
Chickamin River:						
Chickamin River	101-71-004	344	(H)	8/6	ADF&G	
King Creek	101-71-014	236	(A)	7/18	ADF&G	
Herman Creek	101-75-005	11	(F)	9/3	ADF&G	
Grant Creek	101-75-010	8	(A)	8/14	ADF&G	
Eulachon River	101-75-015	288	(H)	8/6	ADF&G	
Unuk River:						
Sawmill Slough	101-75-016	4	(H)	8/6	ADF&G	
Clear Creek	101-75-017	24	(H)	8/6	ADF&G	
Unuk River	101-75-030	1,106	(F)(H)	8/5	ADF&G	
Klehini River	101-75-050	10	(H)	9/3	ADF&G	
Crystal Creek	106-44-031	1,301 3/	(W)	9/26	ADF&G	
Harding River	107-40-049	15	(B)	7/26	ADF&G	
Bradfield River N Fork	107-40-052	55	(H)	8/6	ADF&G	
Stikine River:						
North Arm Creek	108-40-010	15	(F)	8/2	ADF&G	
Shakes Slough Creek	108-40-013	5	(F)	8/22	ADF&G	
Goat Creek	108-40-017	13	(B)	8/10	ADF&G	
Andrews Creek	108-40-020	432	(W)	8/31	ADF&G	
West of Hot Springs	108-40-13A	39	(B)	7/31	ADF&G	
Katsewa River	108-70-011	7	(A)	8/30	ADF&G	
Verrett River	108-70-080	3	(F)	8/23	ADF&G	
Shakes Creek	108-80-080	134	(F)	8/24	ADF&G	
Tahltan River	108-80-100	453	(H)	8/5	ADF&G	
Beatty Creek	108-80-115	83	(H)	7/26	ADF&G	
Little Tahltan River	108-80-120	594	(H)	7/26	ADF&G	
Sashin Creek	109-10-006	1,059 4/	(W)	8/25	NMFS	5/
Farragut River	110-14-007	59	(F)	8/14	ADF&G	
Chuck River	110-32-009	37	(A)	7/27	ADF&G	
King Salmon River	111-17-010	208	(H)	7/15	ADF&G	
Taku River:						
Nakina River	111-32-220	968	(H)	7/27	ADF&G	
Kowetua River	111-32-240	171	(H)	7/29	ADF&G	
Little Trapper Lake	111-32-245	12	(W)	9/15	CDF&O	6/
Little Trapper Inlet	111-32-246	171	(H)	8/15	ADF&G	
Little Tatsemene Lake	111-32-254	236	(H)	8/15	ADF&G	
Nahlin River	111-32-270	391	(H)	7/17	ADF&G	
Tsata Creek	111-32-275	179	(H)	7/29	ADF&G	
Dudidontu River	111-32-280	117	(H)	7/29	ADF&G	
Snettisham Hatchery	111-33-000	23 7/	(W)	9/9	ADF&G	
Chilkat River:						
Big Boulder Creek	115-32-054	121	(H)	8/2	ADF&G	
Kelsall River	115-32-064	15	(H)	8/8	ADF&G	
Tahini River	115-32-068	200 8/	(F)	8/14	ADF&G	
Stonehouse Creek	115-32-301	126	(H)	8/2	ADF&G	
Alsek River:						
Klukahui River	182-30-010	2,547	(H)	8/1	ADF&G	
Situk River	182-70-010	856	(W)	8/18	ADF&G	

1/ Alaska Department of Fish and Game.

2/ Deer Mountain Hatchery returns, includes precocious males.

3/ Crystal Lake Hatchery returns, includes 1,195 precocious males who spent one or two years in the ocean and 58 precocious males who returned after zero winters in the ocean.

4/ Little Port Walter Hatchery returns, includes 631 precocious males who spent one or two years in the ocean.

5/ National Marine Fisheries Service.

6/ Canadian Department of Fisheries and Oceans.

7/ Snettisham Hatchery returns, includes 17 precocious males who spent one or two years in the ocean.

8/ F.R.E.D. Division remote egg take, estimate of escapement.

caution since the proportion of the total run observed within each river varies and is not known; nor is the contribution of "jacks".

Dates of peak escapement counts indicate a slightly later date of spawning for inland versus coastal runs and for southern versus northern runs (Table 24). Escapements typically peaked in the upper Alsek, Taku, and Stikine Rivers in late July to early August while escapements to the shorter coastal rivers in the Behm Canal and Boca de Quadra region (District 101) all peaked after 4 August.

The total estimated chinook salmon escapement to all southeastern Alaska natural runs was 26,817 fish (Table 25), a 44% decrease from the 1982 estimated total escapement of 47,437 fish (Van Aken and Wood 1983). Estimated escapements to the Alsek River and the medium and minor producing systems remained consistent between years, however, the Taku and Stikine Rivers experienced a 64% and 79% decline in escapements, respectively. The decline in escapements to Inklin River stocks, (Nahlin River, Tseta Creek, Duditontu River and others) was expected as a result of a winter 1978-79 landslide on the Inklin River. The slide created a partial block to upstream migrating adults (A.D.F.&G. 1983b) and adversely affected the rearing fry populations of the 1977 brood (Kissner 1980).

Age, Sex, and Size:

Fish aged 1+ dominated the escapements of natural runs (Table 26). Only eight of the 5,021 fish sampled were age 0+. Males were predominately aged 1.1, 1.2, and 1.3 and females were predominately aged 1.3 and 1.4. Males outnumbered females in 12 of the 17 samples. The reader is cautioned, however, that sampling is likely not random with respect to size (and sex) of fish except for Nakina River returns, where one and two-ocean fish (jacks) were sampled in proportion to their return. In the Nakina River males comprised 89% of the run, of which 35% were aged 1.1 and 52% were aged 1.2. Eighty two percent of the females were aged 1.4. Fish aged 1+ also dominated the hatchery returns. From 1980 to 1983 there were no Alaskan hatchery releases of age 0+ fish. Males were predominately age 1.2 and females age 1.3.

Mean length of fish varied considerably between ages, sexes, and samples (Table 27). Small sample sizes preclude an indepth evaluation of the length data. Tahltan River had the largest fish at ages 1.3 and 1.4.

Stock Composition

A minimum estimate of the harvest of non-Alaskan chinook salmon can be made based on age composition analysis and coded microwire tag analysis. Results of this and previous studies (Kissner 1973 and 1980; McBride and Wilcock 1983; Van Aken and Marshall 1983; Van Aken and Wood 1983) has shown that virtually all wild run chinook salmon originating in Southeastern Alaska smolt during their second (age 1+) or third (age 2+) year. While we recognize that Alaska's wild stocks contributed some age 0+ fish to the 1983 harvest, the low incidence of this age class in the escapement samples, coupled with relatively low abundance of spawners lead us to conclude that ignoring the contribution of these fish will result in insignificant bias. Based on analysis of coded microwire tag data (Marshall and Clark

Table 25. Estimated total escapement of chinook salmon to Southeastern Alaska and transboundary river natural runs, 1983.

System/ Tributary	Index Escapement	Tributary Expansion Factor	Aerial Survey Expansion Factor	System Total Escapement	Category Expansion Factor	Total Escapement
Major Systems (3 Total)						
Alsek (Klukshu)	2,547	1.56	1.00	3,980		
Taku (Nakina, Nahlin)	1,359	1.67	1.33	3,020		
Stikine (Little Tahltan)	594	4.00	1.60	3,802		
Major Systems Subtotal:				10,801	1	10,801
Medium Systems (8 Total)						
Situk	856	1.00	1.00	856		
Unuk	1,106	1.00	1.60	1,770		
Chickamin	344	1.00	1.60	550		
Blossom	589	1.00	1.60	942		
Keta	822	1.00	1.60	1,315		
Medium Systems Subtotal:				5,434	8/5	8,694
Minor Systems (22 Total)						
King Salmon	208	1.00	1.60	333		
Minor Systems Subtotal:				333	22/1	7,322
Total All Systems:						26,817

Table 26. Sample age composition of chinook salmon from escapements to Southeastern Alaska and trans-boundary river runs, 1983.

System/ Location/ Stream Number			Brood Year and Age Class												Total			
			1981			1980			1979			1978			1977			
			1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4			
Shakes Creek (108-80-080)	Male	N			3		3		13	1		3				23		
		x			6.1		6.1		26.5	2.0		6.1				46.9		
	Female	N					5		16			5				26		
		x					10.2		32.7			10.2				53.1		
	Sexes	N			3		8		29	1		8				49		
	Combined	x			6.1		16.3		59.2	2.0		16.3				100.0		
Tahltan River (108-80-100)	Male	N			2		1		6			3				12		
		x			8.7		4.3		26.1			13.0				52.2		
	Female	N					2		7			2				11		
		x					8.7		30.4			8.7				47.8		
	Sexes	N			2		3		13			5				23		
	Combined	x			8.7		13.0		56.5			21.7				100.0		
Little Tahltan River (108-80-120)	Male	N			3		43		16			20		3		85		
		x			2.3		32.6		12.1			15.2		2.3		64.4		
	Female	N					2		16			28		1		47		
		x					1.5		12.1			21.2		0.8		35.6		
	Sexes	N			3		45		32			48		4		132		
	Combined	x			2.3		34.1		24.2			36.4		3.0		100.0		
Farragut River (110-14-007)	Male	N	3		12		1	1	7			9		3	1	37		
		x	6.4		25.5		2.1	2.1	14.9			19.1		6.4	2.1	78.7		
	Female	N							1			5		4		10		
		x							2.1			10.6		8.5		21.3		
	Sexes	N	3		12		1	1	8			14		7	1	47		
	Combined	x	6.4		25.5		2.1	2.1	17.0			29.8		14.9	2.1	100.0		
King Salmon River (111-17-010)	Male	N					10		20			14		1		45		
		x					10.9		21.7			15.2		1.1		48.9		
	Female	N					3		2			34		8		47		
		x					3.3		2.2			37.0		8.7		51.1		
	Sexes	N					13		22			48		9		92		
	Combined	x					14.1		23.9			52.2		9.8		100.0		

-Continued-

Table 26. Sample age composition of chinook salmon from escapements to Southeastern Alaska and trans-boundary river runs, 1983 (continued).

System/ Location/ Stream Number	Brood Year and Age Class														
	1981			1980			1979			1978			1977		
	1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4	Total	
Taku River System:															
Fishwheels (111-32-032)	Male	N		1		2							3		
	x				25.0		50.0						75.0		
	Female	N							1				1		
	x								25.0				25.0		
	Sexes	N		1		2				1			4		
	Combined	x			25.0		50.0			25.0			100.0		
Canyon Island Test Gillnet (111-32-032)	Male	N	1	18		96		1		1			117		
	x		0.8	14.2		75.6		0.8		0.8			92.1		
	Female	N				4		2	1		3		10		
	x					3.1		1.6	0.8		2.4		7.9		
	Sexes	N	1	18		100		2	2		4		127		
	Combined	x	0.8	14.2		78.7		1.6	1.6		3.1		100.0		
Little Trapper Lake (111-32-245)	Male	N			7		2						9		
	x				70.0		20.0						90.0		
	Female	N					1						1		
	x						10.0						10.0		
	Sexes	N			7		3						10		
	Combined	x			70.0		30.0						100.0		
Makina River (111-32-220)	Male	N	1,284		1,936		215		278		4		3,717		
	x		30.7		46.2		5.1		6.6		0.1		88.8		
	Female	N				85		384		2		471			
	x					2.0		9.2		.0		11.2			
	Sexes	N	1,284		1,936		300		662		6		4,188		
	Combined	x	30.7		46.2		7.2		15.8		0.1		100.0		
Tataamenee River (111-32-246)	Male	N		1		2							3		
	x			25.0		50.0							75.0		
	Female	N						1					1		
	x							25.0					25.0		
	Sexes	N		1		2				1			4		
	Combined	x		25.0		50.0			25.0				100.0		

-Continued-

Table 26. Sample age composition of chinook salmon from escapements to Southeastern Alaska and trans-boundary river runs, 1983 (continued).

System/ Location/ Stream Number			Brood Year and Age Class												Total	
			1981		1980		1979		1978		1977		1976			
			1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4	
Nahlin River (111-32-270)	Male	N					3		3							6
		x					33.3		33.3							66.7
	Female	N							3							3
		x							33.3							33.3
	Sexes	N					3		6							9
	Combined	x					33.3		66.7							100.0
Taeta River (111-32-275)	Male	N			1		1		4			3				9
		x			3.0		3.0		12.1			9.1				27.3
	Female	N					1		19			4				24
		x					3.0		57.6			12.1				72.7
	Sexes	N			1		2		23			7				33
	Combined	x			3.0		6.1		69.7			21.2				100.0
Chilkat River System:																
Tahini River (115-32-068)	Male	N	1		5		19		31	1		17				74
		x	1.1		5.3		20.2		33.0	1.1		18.1				78.7
	Female	N						2	1	1		16				20
		x						2.1	1.1	1.1		17.0				21.3
	Sexes	N	1		5		19	2	32	2		33				94
	Combined	x	1.1		5.3		20.2	2.1	34.0	2.1		35.1				100.0
Wild Total	Male	N	4	1	1,343	1	2,157	1	354	2		361	11	1	4,236	
		x	0.1	.0	31.7	.0	50.9	.0	8.4	.0		8.5	0.3	.0	100.0	
	Female	N		1	1		24	4	229	1		509	16		785	
		x		0.1	0.1		3.1	0.5	29.2	0.1		64.8	2.0		100.0	
	Sexes	N	4	2	1,344	1	2,161	5	583	3		870	27	1	5,021	
	Combined	x	0.1	.0	26.8	.0	43.4	0.1	11.6	0.1		17.3	0.5	.0	100.0	

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Table 26. Sample age composition of chinook salmon from escapements to Southeastern Alaska and trans-boundary river runs, 1983 (continued).

System/ Location/ Stream Number			Brood Year and Age Class												Total	
			1981		1980		1979		1978		1977		1976			
			1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4	
Hatchery Stocks																
Ketchikan Creek (Deer Mountain Hatchery) (101-47-025)	Male	N					7		15						22	
	x						7.4		16.0						23.4	
	Female	N					1		56						57	
	x						1.1		59.6						60.6	
	Sexes	N					8		71						79	
	Combined	x					10.1		89.9						100.0	
Crystal Creek (Crystal Lake Hatchery) (106-44-031)	Male	N	30	4	133	1					4				172	
	x		31.9	4.3	141.5	1.1					4.3				183.0	
	Female	N			1	5	3				4		2		15	
	x				1.1	5.3	3.2				4.3		2.1		16.0	
	Sexes	N	30		138	4									172	
	Combined	x	17.4		80.2	2.3									100.0	
Sashin Creek (Little Port Walter Hatchery) (109-10-009)	Male	N					4.0	4.0	77.0		2.0				87	
	x						4.3	4.3	81.9		2.1				92.6	
	Female	N					1	4	81		15				101	
	x						1.1	4.3	86.2		16.0				107.4	
	Sexes	N					5	8	158		17				188	
	Combined	x					2.7	4.3	84.0		9.0				100.0	
Snettisham Creek (Snettisham Hatchery) (111-32-000)	Male	N	17.0						1.0						18	
	x		18.1						1.1						19.1	
	Female	N							1						1	
	x								1.1						1.1	
	Sexes	N	17						2						19	
	Combined	x	89.5						10.5						100.0	
Hatchery Total	Male	N	47	4	144	5	93			4	2				299	
	x		9.9	0.8	30.4	1.1	19.7			0.8	0.4				63.2	
	Female	N			1.0	7.0	7.0	138.0		4.0	15.0	2.0			174	
	x				0.2	1.5	1.5	29.2		0.8	3.2	0.4			36.8	
	Sexes	N	47	5	151	12	231			8	17	2			473	
	Combined	x	9.9	1.1	31.9	2.5	48.8			1.7	3.6	0.4			100.0	

Table 27. Size at age (by sex) for chinook salmon from escapements to Southeastern Alaska and transboundary rivers, 1983.

System/ Location/ Stream Number	Sex	Statistic	Brood Year and Age Class																		
			1981	1980	1979	1978	1977	1976	1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4
Wild Stocks																					
Stikine System:																					
Shakes Slough Creek (108-40-013)	Males	X																			
		95% CI																			
		N																			
	Females	X																			
		95% CI																			
		N																			
Rock Island Teatfish (108-40-015)	Males	X																			
		95% CI																			
		N																			
	Females	X																			
		95% CI																			
		N																			
Fishwheels (108-40-015)	Males	X																			
		95% CI																			
		N																			
	Females	X																			
		95% CI																			
		N																			
Andrews Creek (108-40-020)	Males	X																			
		95% CI																			
		N																			
	Females	X																			
		95% CI																			
		N																			
Shakes Creek (108-80-080)	Males	X																			
		95% CI																			
		N																			
	Females	X																			
		95% CI																			
		N																			

-Continued-

Table 27. Size at age (by sex) for chinook salmon from escapements to Southeastern Alaska and transboundary rivers, 1983 (continued).

System/ Location/ Stream Number		Brood Year and Age Class												
		1981		1980		1979		1978		1977		1976		
		1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4
Tahltan River (108-80-100)	Males	X			515			801		1,023				
		95% CI						161		13				
		N			1			6		3				
	Females	X				738		876		1,010				
		95% CI				13		23		30				
		N			2			7		2				
Little Tahltan River (108-80-120)	Males	X		393		552		688		797		642		
		95% CI			31		16	51		67		322		
		N			3		43	16		20		3		
	Females	X				345		753		881		965		
		95% CI						54		11				
		N				1		16		28		1		
Farragut River (110-14-007)	Males	X	363		599		580	925	821	974		1,022	850	
		95% CI	38		10			42		21		18		
		N	3		12		1	1	7		9	3	1	
	Females	X						817		876		893		
		95% CI								11		35		
		N						1		5		4		
King Salmon River (111-17-010)	Males	X				597		748		864		890.0		
		95% CI				15		12		14				
		N				10		20		14		1		
	Females	X				620		785		850		894		
		95% CI				21		5		12		13		
		N				3		2		34		8		
<hr/>														
Taku River System:														
Fishwheels (111-32-032)	Males	X				567								
		95% CI				21								
		N				2								
	Females	X												
		95% CI												
		N												

-Continued-

Table 27. Size at age (by sex) for chinook salmon from escapements to Southeastern Alaska and transboundary rivers, 1983 (continued).

System/ Location/ Stream Number		Brood Year and Age Class												
		1981		1980		1979		1978		1977		1976		
		1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4
Canyon Island (111-32-032)	Males	X		607	445		518		662		930			
		95% CI			9		6							
		N		1	18		96		1		1			
Little Trapper Lake (111-32-245)	Females	X					687	877	850		907			
		95% CI					68	39			7			
		N					4	2	1		3			
Tetsemenee River (111-32-246)	Males	X					558		721					
		95% CI					29		134					
		N					7		2					
Nahlin River (111-32-270)	Females	X						875						
		95% CI												
		N						1						
Taeta River (111-32-068)	Males	X					452		877					
		95% CI					229		50					
		N					3		3					
Females		X						843						
		95% CI						15						
		N						3						
Females		X							823					
		95% CI							9					
		N							19		4			

-Continued-

Table 27. Size at age (by sex) for chinook salmon from escapements to Southeastern Alaska and transboundary rivers, 1983 (continued).

System/ Location/ Stream Number		Brood Year and Age Class												
		1981		1980		1979		1978		1977		1976		
		1.0	0.2	1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	0.6	1.5	2.4
Chilkat River System:														
Tahini River	Males	X	423		458		660		793		990			
(115-32-068)		95% CI	28		57		12		14		12			
		N	3		5		29		27		5			
	Females	X						875	990		890			
		95% CI						10			25			
		N						15	1		3			
Hatchery Stocks														
Ketchikan Creek	Males	X				717		902						
(Deer Mountain Hatchery)		95% CI				27		9						
(101-47-025)		N				7		15						
	Females	X				735		859						
		95% CI				6								
		N				56								
Crystal Creek	Males	X		409	609	600	995		869					
(Crystal Lake Hatchery)		95% CI		7	37	4			21					
(106-44-031)		N		30	4	133	1		4					
	Females	X			745	687	780		819		850			
		95% CI			20	18			12		75			
		N			1	5	3		4		2			
Sashin Creek	Males	X				646	905	837		983				
(Little Port Walter Hatchery)		95% CI				41	52	6		48				
(109-10-009)		N				4	4	77		2				
	Females	X				716	882	836		860				
		95% CI				32	5			11				
		N				1	4	81		15				
Snettisham Creek	Males	X		567			985							
(Snettisham Hatchery)		95% CI		11										
(111-32-000)		N		17					1					
	Females	X					817							
		95% CI					1							
		N												

1986) we conclude that there was a negligible number (38) of age 0. fish contributed in 1983 by Alaskan hatcheries. Therefore, virtually all the 193,644 age 0. fish harvested in Alaskan commercial summer troll, seine, and gillnet fisheries (Table 28) were of non-Alaskan origin. Non-Alaskan fish, therefore, comprised a minimum of 74.9% of the chinook salmon harvested in domestic commercial fisheries the summer of 1983, 19.2% more than in 1982 (Figure 3). In addition, age composition data (Rogers et. al. 1983) indicates that most of the age 1.4 and 1.5 fish harvested, originated from Alaskan or British Columbia runs north of the Fraser River. Scale pattern analysis of Alaskan versus non-Alaskan fish aged 1. in 1982 catches (Van ALEN and Marshall 1983, Van ALEN (in prep.) found that non-Alaskan fish accounted for approximately half of the age 1. fish. If we assume that the stock composition of age 1. fish is similar between years 1982 and 1983 then about 32,411 of the 64,823 age 1. fish caught in the 1983 summer fisheries were of non-Alaskan origin. Therefore, the total estimated contribution of non-Alaskan fish to the 1983 summer troll, seine, and gillnet harvest was approximately 226,055 fish, or 87.5%.

Higher interceptions of non-Alaskan fish in 1983 might be a consequence of the El Nino effect present in 1983 (McLain 1984) which resulted in a northern shift in migration routes for maturing British Columbia, Washington, and Oregon salmon. The shift the past few years in troll effort from inside to outside waters (A.D.F.&G. 1983b), 20 day June closure, early season closures in inside waters, and weak escapements of Alaskan fish likely also contributed toward higher interceptions of non-Alaskan fish.

ACKNOWLEDGMENTS

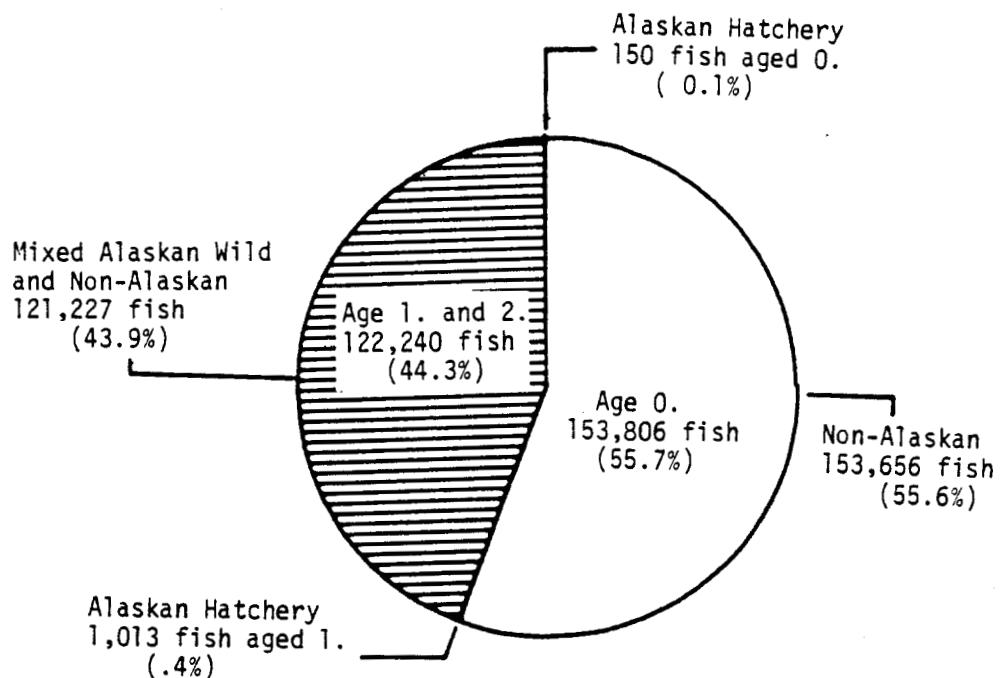
A number of people assisted in the collection of abundance, age, sex, and size data used in this report. Commercial Fisheries Division employees of the Alaska Department of Fish and Game (ADF&G) worked long and irregular hours to collect catch samples. In particular, we thank Cathy Botelho, Karl Hoffmeister, Andy McGregor, Linnea Neuman, Meta Parker, and Jan Weller for their supervisory and sampling efforts. Escapement counts and age, sex, and size data was also provided for returns to Crystal Lake Hatchery, Andrews Creek and Farragut River by Bob Zorich (ADF&G, FRED Division), to Deer Mountain Hatchery by Carol Denton and Jeff Ward (ADF&G, FRED Division), and to Little Port Walter by Alex Wertheimer and Jeff Hard (National Marine Fisheries Service, Auke Bay Laboratory). Brian Lynch and his crew collected samples from chinook salmon caught in fishwheel and test gillnet gear on the Stikine River. Dave Mesiar (ADF&G, Commercial Fisheries Division) and Pat Milligan (Canadian Department of Fisheries and Oceans, Whitehorse) headed up the sampling of chinook salmon caught by gillnet and fishwheel gear in the lower Taku River. Ron Josephson (ADF&G, FRED Division) provided samples from Tahini and King Salmon Rivers and Snnettisham Hatchery. Paul Kissner (ADF&G, Sport Fish Division) provided the Nakina River data and assisted in obtaining several escapement samples. Peter Etherton (Canadian Department of Fisheries and Oceans, Whitehorse) provided data for some escapements in Canada. Appreciation is extended to John E. Clark for his development of the computer programs used to summarize the age, sex, and size data in this report and to Jim Dangle for providing listings of peak escapement counts and commercial catch data. We thank Cathy Botelho, Keith Pahlke and Craig Farrington for their assistance.

Table 28. Southeastern Alaska commercial troll, seine, and gillnet harvest of chinook salmon aged 0., 1983.

Fishery	Area					Total
	Northern Outside	Southern Outside	Northern Inside	Southern Inside		
Winter Troll	4,133	1,208	1,441	1,495	8,277	
	Percent	70.6	72.7	44.1	68.7	63.9
Summer Troll	117,646	29,428	13,108	19,504	179,686	
	Percent	80.2	79.7	56.0	59.1	74.9
Seine	2,009	9,378	421	341	12,149	
	Percent	91.7	91.3	69.6	66.0	89.5
Gillnet	Number	-	697	1,112	1,809	
	Percent	-	23.2	59.2	37.0	

1/ Winter troll includes only the catches made from 13 March to 14 April 1983.

1982



1983

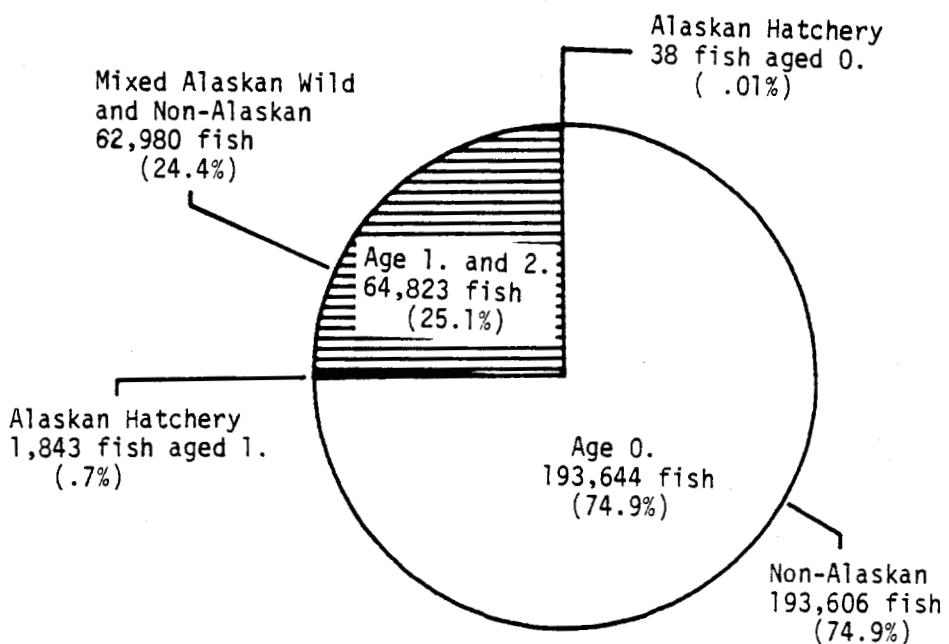


Figure 3. Age composition and coded microwire tag based estimate of the minimum number of non-Alaskan chinook salmon harvested in Southeastern Alaska commercial summer troll, seine, and gillnet fisheries in 1982 and 1983.

in compiling tables. Special thanks go to Eileen Sturrock for her aging of all scales and to Scott McPherson for his supervision of scale aging activities. Editorial review by Dr. Phil Mundy and Mel Seibel is appreciated.

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APPENDICES

Appendix Table 1. Sample size needed to describe the age composition of a seven-age class population of increasing size with an accuracy of $\pm 5\%$ and a precision of 0.10.

Population Size	Number Needed in Sample 1/
500	273
1,000	376
1,500	429
2,000	462
2,500	485
3,000	501
3,500	513
4,000	523
4,500	530
5,000	537
6,000	546
7,000	554
8,000	559
9,000	563
10,000	567
15,000	578
20,000	583
25,000	587
30,000	589
35,000	591
40,000	592
45,000	593
50,000	594
60,000	595
70,000	596
80,000	597
90,000	597
100,000	597
infinite	601

1/ Based on Cochran (1977) using the following formula:

$$n = \frac{no}{1 + \frac{(no - 1)}{N}}$$

Where: n = adjusted sample size
 no = 601 (sample size needed for an infinitely large population)
 N = population size

Appendix Table 2. Winter troll harvest of chinook salmon in pounds by district and statistical week,
1 October 1982 to 14 April 1983. Dash (-) indicates district closed to fishing for
that particular week.

Year	Stat. Week	Inclusive Dates	Southern Inside Districts										Southern Outside Districts					Northern Inside Districts									
			101	102	105	106	107	108	103	104	152	109	110	111	112	114	115	113	116	154	157	181	183	189	Total		
1982	40	01 Oct-02 Oct	118	53	0	0	0	27	0	0	-	0	0	0	0	0	257	0	415	-	-	0	0	-	0	0	870
	41	03 Oct-09 Oct	2,080	558	255	1,283	4,771	1,361	0	0	-	2,000	1,046	0	729	10,007	0	7,499	-	-	0	757	-	33,554			
	42	10 Oct-16 Oct	2,327	3,341	0	3,697	187	639	183	0	-	246	1,379	0	0	6,288	0	5,142	-	-	0	446	-	23,077			
	43	17 Oct-23 Oct	3,206	3,692	271	2,153	1,190	831	37	0	-	3,421	801	0	0	3,790	0	11,796	-	-	0	178	-	31,374			
	44	24 Oct-30 Oct	1,903	2,671	0	1,516	822	1,397	0	81	-	786	2,117	0	0	3,836	0	1,741	-	-	0	0	-	16,870			
	45	31 Oct-06 Nov	853	2,944	0	369	1,049	26	31	0	-	1,338	909	0	0	3,077	0	1,084	-	-	0	0	-	13,280			
	46	07 Nov-13 Nov	1,311	2,400	0	1,253	267	34	99	459	-	0	530	0	0	789	0	3,205	-	-	0	0	-	10,347			
	47	14 Nov-20 Nov	1,188	2,075	0	533	84	18	0	0	-	289	22	0	0	504	0	2,036	-	-	0	0	-	7,549			
	48	21 Nov-27 Nov	2,695	170	246	0	244	143	258	0	-	0	0	0	0	229	0	2,728	-	-	0	0	-	6,707			
	49	28 Nov-04 Dec	188	490	0	97	0	249	521	0	-	0	58	0	0	422	0	6,587	-	-	0	0	-	8,612			
	50	05 Dec-11 Dec	152	470	0	17	657	0	424	704	-	0	0	0	0	36	0	1,922	-	-	0	0	-	4,382			
	51	12 Dec-18 Dec	331	92	0	17	371	673	0	280	-	162	0	0	0	0	0	1,417	-	-	0	0	-	3,343			
	52	19 Dec-25 Dec	138	0	0	0	1,665	137	183	0	-	0	34	11	0	0	0	4,987	-	-	0	0	-	7,875			
	53	26 Dec-31 Dec	102	691	0	0	715	0	0	0	-	0	0	0	0	0	0	487	-	-	0	0	-	1,995			
1983	Unspecified			13	0	0	0	0	0	0	-	0	0	0	0	0	0	0	-	-	-	-	-	-	-	13	
	1	01 Jan-01 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	21	0	12	-	-	0	0	-	33	
	2	02 Jan-08 Jan	55	44	0	47	893	298	0	64	-	0	13	0	0	125	0	738	-	-	0	0	-	2,277			
	3	09 Jan-15 Jan	30	183	0	0	1,111	0	0	0	-	0	0	0	0	192	0	69	-	-	0	0	-	1,505			
	4	16 Jan-22 Jan	11	0	0	16	750	79	28	135	-	0	0	0	0	171	0	1,898	-	-	0	0	-	3,000			
	5	23 Jan-29 Jan	0	24	0	12	0	0	112	0	-	19	0	0	0	0	0	6,975	-	-	0	0	-	7,142			
	6	30 Jan-05 Feb	0	326	277	59	0	292	425	440	-	237	295	0	0	559	0	6,954	-	-	0	0	-	9,864			
	7	06 Feb-12 Feb	0	137	417	12	124	243	561	315	-	1,313	62	0	0	894	0	3,068	-	-	0	0	-	7,146			
	8	13 Feb-19 Feb	35	226	432	342	0	287	4,039	767	-	306	26	0	0	241	0	7,253	17	-	0	0	-	12,954			
	9	20 Feb-26 Feb	168	399	658	547	0	28	500	562	-	510	0	0	0	196	0	3,267	-	-	0	0	-	6,545			
	10	27 Feb-05 Mar	50	285	99	71	0	150	1,647	1,220	-	879	293	0	0	1,629	0	9,238	-	-	0	110	-	15,507			
	11	06 Mar-12 Mar	91	78	285	733	505	43	1,310	402	-	1,225	16	0	0	726	0	17,457	27	-	0	0	-	22,871			
	12	13 Mar-19 Mar	124	129	1,066	1,192	683	517	1,520	652	-	1,876	71	0	0	1,654	0	8,053	37	-	0	0	-	17,547			
	13	20 Mar-26 Mar	664	982	0	677	292	179	3,613	354	-	5,199	20	0	0	3,172	0	22,314	47	-	0	270	-	37,646			
	14	27 Mar-02 Apr	231	332	513	579	449	490	2,788	161	-	476	80	0	0	6,396	0	9,007	-	-	0	0	-	21,582			
	15	03 Apr-09 Apr	553	368	496	1,686	1,189	861	3,440	865	-	3,458	58	0	0	5,776	0	19,442	-	-	0	169	-	38,363			
	16	10 Apr-14 Apr	1,942	3,125	3,622	4,202	57	822	945	6,075	179	-	10,381	146	0	519	9,888	0	34,616	67	-	0	1,981	77	79,163		
District Total			21,161	26,525	8,431	21,316	19,560	9,947	27,594	7,640	0	34,129	7,886	11	1,248	61,523	0	282,199	0	0	0	0	3,913	0	453,073		
Area Total			186,930			35,234			104,797									206,112									

- 1/ Includes 2,724 pounds of chinook reported in District 157.
 2/ Includes 727 pounds of chinook reported in District 116.
 3/ Includes 591 pounds of chinook reported in District 116.
 4/ Includes 2,135 pounds of chinook reported in District 116.
 5/ Includes 84 pounds of chinook reported in statistical week 17.
 6/ Includes 311 pounds of chinook reported in statistical week 17.
 Includes 915 pounds of chinook reported in District 116.
 7/ Includes 311 pounds of chinook reported in statistical week 17.
 Includes 985 pounds of chinook reported in statistical week 18.
 Includes 219 pounds of chinook reported in statistical week 19.
 Includes 142 pounds of chinook reported in statistical week 20.

Appendix Table 3. Winter power troll harvest of chinook salmon in pounds by district and statistical week, 1 October 1982 to 14 April 1983. Dash (-) indicates district closed to fishing for that particular week.

Year	Stat.	Inclusive Dates	Southern Inside Districts						Southern Outside Districts						Northern Inside Districts						Northern Outside Districts						Total
			101	102	105	106	107	108	103	104	102	109	110	111	112	114	115	113	116	154	157	101	103	109			
1982	40	01 Oct-02 Oct	118	53	0	0	0	0	0	0	-	0	0	0	0	36	0	322	-	-	-	0	0	-	529		
	41	03 Oct-09 Oct	2,648	664	0	829	3,934	626	0	0	-	1,364	706	0	501	4,277	0	6,904	-	-	-	0	0	-	22,453		
	42	10 Oct-16 Oct	2,251	3,101	0	3,342	187	540	183	0	-	246	1,366	0	0	3,346	0	4,153	-	-	-	0	0	-	18,715		
	43	17 Oct-23 Oct	2,736	3,566	0	2,114	1,190	792	37	0	-	2,434	614	0	0	1,656	0	10,751	-	-	-	0	0	-	25,890		
	44	24 Oct-30 Oct	1,707	0	830	0	933	0	0	0	-	0	2,117	0	0	1,819	0	1,374	-	-	-	0	0	-	11,267		
	45	31 Oct-06 Nov	796	2,597	0	230	1,115	11	31	0	-	606	867	0	0	1,712	0	841	-	-	-	0	0	-	8,086		
	46	07 Nov-13 Nov	1,229	2,329	0	1,048	182	17	0	459	-	0	410	0	0	47	0	3,134	-	-	-	0	0	-	8,055		
	47	14 Nov-20 Nov	697	1,411	0	365	84	0	0	0	-	289	0	0	0	209	0	2,706	-	-	-	0	0	-	5,761		
	48	21 Nov-27 Nov	2,695	170	240	0	244	143	130	0	-	0	0	0	0	0	0	2,665	-	-	-	0	0	-	6,287		
	49	28 Nov-04 Dec	188	90	0	80	0	234	521	0	-	0	0	0	0	0	0	6,090	-	-	-	0	0	-	7,263		
	50	05 Dec-11 Dec	97	444	0	0	434	0	302	704	-	0	0	0	0	36	0	1,510	-	-	-	0	0	-	3,527		
	51	12 Dec-18 Dec	118	92	0	0	121	673	0	200	-	162	0	0	0	0	0	1,211	-	-	-	0	0	-	2,657		
	52	19 Dec-25 Dec	138	0	0	0	1,019	137	183	0	-	0	34	0	0	0	0	4,495	-	-	-	0	0	-	6,006		
	53	26 Dec-31 Dec	102	495	0	0	133	0	0	0	-	0	0	0	0	0	0	360	-	-	-	0	0	-	1,090		
1983	Unspecified	13	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	-	-	-	0	0	-	13		
	1	01 Jan-01 Jan	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	12	-	-	-	0	0	-	12		
	2	02 Jan-08 Jan	55	44	0	0	205	0	0	64	-	0	0	0	0	0	0	626	-	-	-	0	0	-	994		
	3	09 Jan-15 Jan	30	183	0	0	1,111	0	0	0	-	0	0	0	0	0	192	0	44	-	-	-	0	0	-	1,568	
	4	16 Jan-22 Jan	11	0	0	0	203	11	20	135	-	0	0	0	0	0	40	0	1,774	-	-	-	0	0	-	2,202	
	5	23 Jan-29 Jan	0	24	0	0	0	0	112	0	-	0	0	0	0	0	0	6,968	-	-	-	0	0	-	7,096		
	6	30 Jan-05 Feb	0	186	0	0	169	425	440	-	237	0	0	0	0	0	0	6,287	-	-	-	0	0	-	7,744		
	7	06 Feb-12 Feb	0	104	417	0	76	123	561	315	-	1,313	0	0	0	0	0	2,974	-	-	-	0	0	-	5,083		
	8	13 Feb-19 Feb	35	174	207	316	0	133	2,875	767	-	250	26	0	0	0	0	7,056	17	-	-	0	0	-	11,839		
	9	20 Feb-26 Feb	168	123	458	507	0	0	500	562	-	174	0	0	0	0	40	0	2,934	-	-	-	0	0	-	5,466	
	10	27 Feb-05 Mar	27	205	0	28	0	29	734	1,077	-	633	80	0	0	0	211	0	9,131	-	-	-	0	0	-	12,155	
	11	06 Mar-12 Mar	91	78	285	642	241	43	1,265	256	-	941	0	0	0	0	0	16,598	27	-	-	0	0	-	28,532		
	12	13 Mar-19 Mar	72	139	701	956	577	237	1,484	652	-	1,491	0	0	0	0	377	0	7,448	37	-	-	0	0	-	14,134	
	13	20 Mar-26 Mar	381	553	0	424	71	0	3,310	354	-	5,014	0	0	0	0	2,644	0	28,879	47	-	-	0	0	-	33,630	
	14	27 Mar-02 Apr	116	332	321	462	132	213	2,598	161	-	320	61	0	0	0	3,764	0	6,555	-	-	-	0	0	-	15,825	
	15	03 Apr-09 Apr	177	273	496	1,458	751	294	2,142	677	-	2,097	0	0	0	0	4,578	0	17,823	-	-	-	0	97	-	31,635	
	16	10 Apr-14 Apr	614	2,948	2,592	3,275	57	570	5,816	126	-	9,294	60	0	485	5,661	0	32,896	67	-	-	0	992	77	65,996		
	District Total		17,310	22,865	5,717	16,898	12,757	5,928	23,237	7,829	0	27,665	6,341	0	986	38,645	0	186,605	0	0	0	0	1,009	0	364,992		
	Area Total			81,475		38,256						65,557							187,694								

1/ Includes 2,724 pounds of chinook reported in District 157.

2/ Includes 727 pounds of chinook reported in District 116.

3/ Includes 591 pounds of chinook reported in District 116.

4/ Includes 2,135 pounds of chinook reported in District 116.

5/ Includes 84 pounds of chinook reported in statistical week 17.

6/ Includes 915 pounds of chinook reported in District 116.

7/ Includes 44 pounds of chinook reported in statistical week 17.

8/ Includes 822 pounds of chinook reported in statistical week 18.

9/ Includes 27 pounds of chinook reported in statistical week 19.

Appendix Table 4. Winter hand troll harvest of chinook salmon in pounds by district and statistical week, 1 October 1982 to 14 April 1983. Dash (-) indicates district closed to fishing for that particular week.

17 Includes 28 pounds reported in statistical week 17.

27 Includes 267 pounds reported in statistical week 17.

Includes 163 pounds reported in statistical week 18.

Includes 192 pounds reported in statistical week 19.

Includes 142 pounds reported in statistical week 28.

Appendix Table 5. Summer troll harvest of chinook salmon in pounds by district and statistical week, 1983.
 Dash (-) indicates district closed to fishing for that particular week.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts						Northern Inside Districts						Northern Outside Districts					
		101	102	103	106	107	108	103	104	102	109	110	111	112	115	113	114	116	154	157	101	103	109	Total	
21	15 May-21 May	359	3,079	4,257	1,003	8,394	0	13,106	55,159	0	8,370	1,524	0	1,600	0	62,443	16,006	40,501	555	1,837	0	1,146	0	220,219	
22	22 May-28 May	4,870	21,814	12,376	3,447	8,953	155	20,428	69,333	0	17,816	14,291	0	3,202	0	96,663	24,624	86,704	538	38,561	2,590	2,395	933	421,693	
23	29 May-04 Jun	2,209	27,673	5,056	7,006	10,023	275	13,694	80,948	0	20,113	7,936	0	5,598	0	94,891	30,501	36,598	2,173	6,588	0	1,487	633	353,386	
24	05 Jun-07 Jun	8,518	31,784	12,353	7,353	7,285	0	14,487	57,248	0	29,875	18,617	0	5,497	0	105,408	36,657	44,938	16,799	69,398	3,928	4,692	2,397	351,746	
27	01 Jul-02 Jul	1,839	1,549	2,564	4,296	1,031	0	4,706	13,262	0	1,785	1/ 217	0	1,949	21	43,236	2,463	2/ 3,084	0	0	0	0	0	82,092	
28	03 Jul-09 Jul	15,069	36,711	12,103	16,796	3,991	0	15,121	73,041	0	25,549	14,518	0	9,657	54	428,049	23,400	9,626	21,584	5,318	0	4,098	3,353	710,918	
29	10 Jul-16 Jul	9,232	17,884	4,271	2,671	2,216	147	9,561	43,600	31	24,243	8,199	0	9,981	17	194,166	16,236	9,721	2,984	3,056	301	3,652	0	362,969	
30	17 Jul-23 Jul	11,614	21,417	2,897	10,845	25	0	9,501	32,106	0	28,779	6,198	0	10,254	31	226,549	15,728	8,247	12,069	2,104	0	3,628	2,977	395,969	
31	24 Jul-30 Jul	7,835	13,860	2,568	5,528	352	128	7,100	28,950	0	20,724	6,299	0	9,969	0	233,500	16,422	21,068	0	0	0	628	0	375,083	
32	31 Jul-04 Aug	6,786	3/ 13,600	5,314	5,444	0	0	2,601	16,583	0	19,238	7,105	0	5,236	10	236,984	5/ 25,539	4/ 36,449	0	3,213	1,900	1,277	6/ 7,958	7/ 395,229	
District Total		68,331	189,371	63,759	64,989	42,190	705	110,385	470,150	31	100,492	84,904	0	63,015	133	1,794,769	208,456	296,928	58,702	122,867	8,799	22,987	18,243	3,878,206	
Area Total		429,345						580,566						336,544						2,523,751					

- 1/ Includes 157 pounds of chinook reported in statistical week 26.
- 2/ Includes 1,219 pounds of chinook reported in statistical week 26.
- 3/ Includes 167 pounds of chinook reported in statistical week 35.
- 4/ Includes 192 pounds of chinook reported in statistical week 34.
- Includes 17 pounds of chinook reported in statistical week 35.
- Includes 244 pounds of chinook reported in statistical week 36.
- 5/ Includes 21,469 pounds of chinook reported in statistical week 33.
- Includes 5,820 pounds of chinook reported in statistical week 36.
- 6/ Includes 298 pounds of chinook reported in statistical week 34.
- 7/ Includes 7,958 pounds of chinook reported in statistical week 33.

Appendix Table 6. Summer power troll harvest of chinook salmon in pounds by district and statistical week, 1983. Dash (-) indicates district closed to fishing for that particular week.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts						Northern Outside Districts						Total	
		101	102	105	106	107	108	103	104	152	109	110	111	112	115	113	114	116	154	157	181	183	189	
21	15 May-21 May	124	1,598	2,030	345	5,141	0	4,798	50,970	0	5,843	204	0	0	50,717	11,621	40,055	555	1,837	0	0	0	0	175,838
22	22 May-28 May	3,547	14,955	9,314	2,490	5,096	155	10,800	66,107	0	13,124	11,132	0	591	0	87,356	18,335	85,539	538	30,561	2,590	592	0	362,830
23	29 May-04 Jun	2,175	20,564	2,777	3,513	5,309	275	7,486	75,964	0	15,003	4,797	0	2,646	0	85,151	19,792	35,870	2,173	6,588	0	768	633	293,514
24	05 Jun-07 Jun	6,551	25,317	11,523	6,855	3,883	0	10,402	53,095	0	24,506	15,165	0	2,942	0	177,099	38,990	44,632	10,799	69,390	3,928	2,575	2,397	502,049
27	01 Jul-02 Jul	330	170	1,161	2,540	860	0	1,882	18,470	0	1,287	0	0	440	0	33,169	489	3,084	0	0	0	0	0	55,882
28	03 Jul-09 Jul	11,085	28,923	7,617	14,575	2,724	0	7,384	66,314	0	21,600	10,217	0	4,533	0	395,512	16,715	9,526	21,584	5,318	0	3,737	3,353	631,517
29	10 Jul-16 Jul	6,866	13,419	2,753	1,703	1,396	0	4,570	40,334	31	21,010	3,603	0	3,331	0	184,990	11,497	7,721	2,984	3,856	301	3,036	0	313,481
30	17 Jul-23 Jul	9,093	16,519	2,024	9,617	25	0	4,561	27,722	0	14,960	4,856	0	5,479	0	216,938	13,006	6,481	12,069	2,104	0	3,109	2,977	351,620
31	24 Jul-30 Jul	6,514	10,961	1,746	3,300	352	0	3,367	26,526	0	16,021	4,942	0	3,678	0	222,723	12,241	17,142	0	0	0	224	0	329,737
32	31 Jul-04 Aug	5,671	12,037	4,793	4,801	0	0	1,689	15,397	0	15,428	5,582	0	2,572	0	231,184	17,20,627	34,226	0	3,213	1,980	454	7,950	2/ 367,524
District Total		52,756	144,463	45,730	51,739	24,816	430	56,947	432,899	31	148,782	68,418	0	26,212	0	1,684,839	155,393	204,276	50,702	122,867	8,799	14,495	17,310	3,383,912
Area Total			319,942					489,877							235,412					2,338,681				

1/ Includes 21,210 pounds of chinook reported in statistical week 33.

Includes 5,820 pounds of chinook reported in statistical week 36.

2/ Includes 7,950 pounds of chinook reported in statistical week 33.

Appendix Table 7. Summer hand troll harvest of chinook salmon in pounds by district and statistical week, 1983. Dash (-) indicates district closed to fishing for that particular week.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts				Northern Inside Districts						Northern Outside Districts						Total
		101	102	105	106	107	108	103	104	152	109	110	111	112	115	113	114	116	154	157	181	183	189	
21	15 May-21 May	235	1,481	2,227	658	3,253	0	8,308	4,189	0	2,527	1,320	0	1,600	0	11,726	5,185	446	0	0	0	1,146	0	44,381
22	22 May-28 May	1,323	6,859	3,062	957	3,057	0	9,620	3,226	0	4,692	3,159	0	2,611	0	9,387	6,289	1,165	0	0	0	1,003	933	58,863
23	29 May-04 Jun	34	7,109	2,279	1,493	4,684	0	6,208	4,984	0	5,110	3,139	0	2,944	0	9,740	10,709	720	0	0	0	719	0	59,872
24	05 Jun-07 Jun	1,967	6,467	830	1,098	3,322	0	4,065	4,153	0	5,369	3,452	0	2,555	0	8,309	5,667	306	0	0	0	2,117	0	49,697
27	01 Jul-02 Jul	1,509	1,379	1,403	1,756	171	0	2,824	2,792	0	498	0	1,509	10,067	1,974	0	0	0	0	0	0	0	26,120	
28	03 Jul-09 Jul	1,184	7,788	4,486	2,221	1,267	0	7,737	6,727	0	3,949	4,301	0	5,124	54	25,337	6,765	100	0	0	0	353	0	79,393
29	10 Jul-16 Jul	2,366	4,465	1,518	968	820	147	4,991	3,266	0	3,233	4,596	0	6,650	17	9,176	4,739	2,000	0	0	0	616	0	49,568
30	17 Jul-23 Jul	2,521	4,698	873	1,228	0	0	4,940	4,384	0	3,819	1,342	0	4,775	31	9,611	2,642	1,766	0	0	0	519	0	45,349
31	24 Jul-30 Jul	1,321	2,899	822	2,228	0	128	3,813	2,424	0	4,783	1,357	0	6,291	0	10,857	4,181	3,986	0	0	0	396	0	45,346
32	31 Jul-04 Aug	1,115	3/ 1,563	521	643	0	0	912	1,106	0	3,810	1,603	0	2,664	5,800	0	0	0	0	0	823	0	27,705	
District Total		15,575	44,908	18,021	13,250	17,374	275	53,438	37,251	0	39,710	24,486	0	36,803	133	109,930	53,063	12,652	0	0	0	8,492	933	486,294
Area Total		109,403						90,689				101,132						105,070						

- 1/ Includes 157 pounds reported in statistical week 26.
 2/ Includes 1,219 pounds reported in statistical week 26.
 3/ Includes 167 pounds reported in statistical week 35.
 4/ Includes 192 pounds reported in statistical week 34.
 Includes 17 pounds reported in statistical week 35.
 Includes 244 pounds reported in statistical week 36.
 5/ Includes 259 pounds reported in statistical week 33.
 6/ Includes 298 pounds reported in statistical week 34.

Appendix Table 8. Purse seine harvest of chinook salmon in pounds by district and statistical week, 1983.
 Dash (-) indicates fishery closed.

Stat. Week	Inclusive Dates	District												Total
		101	102	103	104	105	106	107	109	110	112	113	114	
28	03 Jul-09 Jul	0	-	-	46,302	-	-	-	-	-	-	-	-	46,302
29	10 Jul-16 Jul	479	0	-	18,430	-	-	-	-	-	493	-	-	19,402
30	17 Jul-23 Jul	1,723	314	-	20,162	-	-	-	-	776	1,866	238	-	25,079
31	24 Jul-30 Jul	1,835	216	-	31,496	-	-	-	197	744	1,247	4,677	1,355	41,767
32	31 Jul-06 Aug	912	139	-	15,607	-	0	-	22	208	574	12,421	222	30,105
33	07 Aug-13 Aug	446	0	1,285	24,368	20	44	84	76	-	1,240	4,396	-	31,959
34	14 Aug-20 Aug	399	333	351	9,569	0	44	0	0	-	105	1,422	-	12,223
35	21 Aug-27 Aug	292	64	499	9,611	287	-	0	242	-	75	20	-	11,090
36	28 Aug-03 Sep	26	162	0	-	0	-	0	5	-	0	0	-	193
37	04 Sep-10 Sep	-	-	-	-	-	-	-	-	-	-	-	-	0
38	11 Sep-17 Sep	-	9	-	-	-	-	-	-	-	-	-	86	95
District Total		6,112	1,237	2,135	175,545	307	88	84	542	952	4,510	24,802	1,901	218,215

Appendix Table 9. Gillnet harvest of chinook salmon in pounds by district and statistical week, 1983.
 Dash (-) indicates fishery closed.

Stat. Week	Inclusive Dates	District					Total
		101	106	108	111	115	
25	12 Jun-18 Jun	45	-	-	-	-	45
26	19 Jun-25 Jun	3,981	281	-	1,374	379	6,015
27	26 Jun-02 Jul	5,227	1,123	-	1,799	588	8,737
28	03 Jul-09 Jul	1,725	876	-	1,605	1,790	5,996
29	10 Jul-16 Jul	734	147	-	322	2,304	3,507
30	17 Jul-23 Jul	1,234	382	-	101	1,451	3,168
31	24 Jul-30 Jul	756	202	-	826	2,032	3,816
32	31 Jul-06 Aug	613	46	-	710	1,667	3,036
33	07 Aug-13 Aug	253	346	-	176	1,254	2,029
34	14 Aug-20 Aug	84	101	0	114	355	654
35	21 Aug-27 Aug	234	172	43	135	832	1,416
36	28 Aug-03 Sep	142	192	59	135	2,367	2,895
37	04 Sep-10 Sep	152	169	199	126	193	839
38	11 Sep-17 Sep	27	191	140	7	487	852
39	18 Sep-24 Sep	91	45	26	16	110	288
40	25 Sep-01 Oct	-	679	0	-	383	1,062
41	02 Oct-08 Oct	-	-	-	-	160	160
42	09 Oct-15 Oct	-	-	-	-	8	8
District Total		15,298	4,952	467	7,446	16,360	44,523

Appendix Table 10. Average weight of chinook salmon harvested in winter troll fishery, 1 October 1982 to 14 April 1983.

Year	Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts				Northern Outside Districts			Total	
			101	102	103	105	106	107	108	103	104	109	110	111	112	114	113	103		
1982	40	01 Oct-02 Oct	11.8	10.6					13.5							11.2	14.3	12.6		
	41	03 Oct-09 Oct	11.8	12.4	14.2	12.8	13.5	13.7				13.1	14.7		14.3	13.7	14.5	10.8	13.4	
	42	10 Oct-16 Oct	11.8	10.2			11.6	13.4	14.5	13.1			14.5	15.3			15.9	14.2	11.2	13.1
	43	17 Oct-23 Oct	13.4	11.1	14.3	12.1	12.8	12.0		18.5			12.2	14.3			12.5	16.3	11.9	13.6
	44	24 Oct-30 Oct	12.3	12.4			13.1	11.1	12.7		20.3		16.8	14.8			14.2	15.8		14.1
	45	31 Oct-06 Nov	12.2	13.6			11.9	12.3	13.0	31.0			16.7	14.0			14.2	13.9		13.7
	46	07 Nov-13 Nov	10.7	12.6			13.5	12.1	17.0	11.0	11.2			14.7			14.2	13.9		12.9
	47	14 Nov-20 Nov	13.1	13.1			13.7	16.8	18.0				16.1	11.0			15.8	14.3		13.9
	48	21 Nov-27 Nov	11.1	12.1	14.1		13.6	13.0		11.2							15.3	12.7		12.1
	49	28 Nov-04 Dec	14.5	14.8			19.4		13.8	14.9			14.5				16.9	14.6		14.7
	50	05 Dec-11 Dec	10.9	15.2			17.0	13.7		13.3							18.0	13.8		13.6
	51	12 Dec-18 Dec	13.8	11.5			17.0	16.9	6.5		11.7	14.7						14.9		11.6
	52	19 Dec-25 Dec	17.3						19.4	17.1	13.1			11.3	11.0			15.7		16.4
	53	26 Dec-31 Dec	17.0	13.3					15.2									17.4		15.0
1983		Unspecified	13.0																13.0	
	1	01 Jan-01 Jan														21.0	12.0		16.5	
	2	02 Jan-08 Jan	7.9	14.7		21.5	14.4	11.0		10.7			13.0				17.9	18.0		14.6
	3	09 Jan-15 Jan	10.0	10.8			16.6										16.0	13.8		15.2
	4	16 Jan-22 Jan	11.0				16.0	14.2	11.3	14.0	11.3						19.0	15.5		14.9
	5	23 Jan-29 Jan		12.0			12.0			12.4			19.0					17.2		17.1
	6	30 Jan-05 Feb	11.6	12.6	11.8		17.2	12.1	14.7	13.9	14.0						15.5	16.4		15.5
	7	06 Feb-12 Feb	17.1	14.4	12.0	12.4	11.6	13.7	13.7			14.9	12.4				13.5	15.6		14.6
	8	13 Feb-19 Feb	11.7	11.9	14.4	14.3	10.3	12.7	14.2	13.9	26.0						16.1	15.4		14.3
	9	20 Feb-26 Feb	11.2	11.9	12.7	12.4	14.0	12.2	13.7	15.9							15.1	18.0		15.2
	10	27 Feb-05 Mar	8.3	12.1	14.1	15.4		12.5	13.4	13.7	16.3	15.6					15.1	15.6	10.0	15.0
	11	06 Mar-12 Mar	13.0	9.8	13.6	12.9	12.6	14.3	13.8	11.2	14.8	8.0					14.2	18.9		17.1
	12	13 Mar-19 Mar	11.3	11.6	13.8	13.5	12.2	15.7	14.8	11.4	14.1	14.2					15.6	17.0		15.2
	13	20 Mar-26 Mar	11.0	12.9			14.6	11.2	17.9	13.1	14.2	15.3	20.0				13.5	17.0	15.0	15.6
	14	27 Mar-02 Apr	11.6	10.1	13.2	12.3	12.5	12.6	12.0	16.1	17.0	16.0					14.7	17.3		14.9
	15	03 Apr-09 Apr	11.8	9.2	13.1	14.8	9.7	15.7	12.7	12.4	14.7	14.5					15.4	15.6	12.1	14.5
	16	10 Apr-14 Apr	13.9	11.6	14.4	14.5	16.1	15.0	11.4	10.5	14.7	20.9					20.8	15.5	16.2	15.8
	District Total		12.1	12.0	14.0	13.2	14.0	12.7		12.6	12.9	14.6	14.7	11.0	16.4	14.6	15.1	13.4	14.5	
	Area Total					12.8				12.6			14.6					15.0		

Appendix Table 11. Average weight of chinook salmon harvested in the winter power troll fishery, 1 October 1982 to 14 April 1983.

Year	Stat. Week	Inclusive Dates	Southern Inside Districts					Southern Outside Districts				Northern Inside Districts				Northern Outside Districts		
			101	102	105	106	107	108	103	104	109	110	112	114	113	103	Total	
1982	40	01 Oct-02 Oct	11.8	10.6										9.8	14.0	12.6		
	41	03 Oct-09 Oct	10.9	12.1		12.2	13.6	13.9			12.1	15.7	14.3	11.9	14.3	13.8		
	42	10 Oct-16 Oct	12.2	10.1		11.6	13.4	13.8	13.1		14.5	15.3		15.3	14.1	12.8		
	43	17 Oct-23 Oct	13.5	11.1		12.1	12.8	11.8	10.5		13.0	13.3		10.5	16.9	13.7		
	44	24 Oct-30 Oct	12.3	12.4		11.7		13.3			14.8		13.7	15.6	13.3			
	45	31 Oct-06 Nov	12.2	13.9		11.8	13.8	11.8	31.0		17.8	13.8		13.6	13.1	13.7		
	46	07 Nov-13 Nov	10.9	12.6		13.1	12.1	17.0		11.2		13.2		11.8	13.9	12.7		
	47	14 Nov-20 Nov	12.2	13.6		13.0	16.8				16.1			17.4	14.2	13.9		
	48	21 Nov-27 Nov	11.1	12.1	14.1		13.6	13.0	10.8						12.6	12.8		
	49	28 Nov-04 Dec	14.5	12.9		29.0		13.8	14.9						14.4	14.5		
	50	05 Dec-11 Dec	9.7	15.3			14.5		13.7	12.8				18.0	13.1	13.4		
	51	12 Dec-18 Dec	10.7	11.5			17.3	6.5		11.7	14.7				15.0	10.8		
	52	19 Dec-25 Dec	17.3				19.6	17.1	13.1			11.3			15.8	16.3		
	53	26 Dec-31 Dec	17.0	12.7			16.6								17.1	14.7		
1983		Unspecified	13.0													13.0		
	1	01 Jan-01 Jan													12.8	12.0		
	2	02 Jan-08 Jan	7.9	14.7			10.8			10.7					19.0	14.6		
	3	09 Jan-15 Jan	10.0	10.8			16.6							16.0	14.7	15.3		
	4	16 Jan-22 Jan	11.0				14.5	11.0	14.0	11.3					15.7	15.4		
	5	23 Jan-29 Jan		12.0					12.4						17.2	17.1		
	6	30 Jan-05 Feb		10.9				14.1	12.1	14.7	13.9				16.4	15.6		
	7	06 Feb-12 Feb		17.3	14.4		10.9	10.3	13.7	13.7	14.9				15.5	14.8		
	8	13 Feb-19 Feb	11.7	11.6	12.9	14.4		9.5	12.7	14.2	13.9	26.0			14.9	14.3		
	9	20 Feb-26 Feb	11.2	12.3	12.7	12.1			12.2	13.7	15.8			20.0	18.5	15.3		
	10	27 Feb-03 Mar	9.0	12.1		14.0		14.5	13.3	13.6	17.6	16.0		15.1	15.7	15.3		
	11	04 Mar-12 Mar	13.0	9.8	13.6	12.6	13.4	14.3	13.8	11.1	14.0				19.3	17.6		
	12	13 Mar-19 Mar	10.3	11.6	14.0	13.1	13.1	13.9	15.0	11.4	13.6				15.1	17.8	15.2	
	13	20 Mar-26 Mar	10.3	11.1		13.3	14.2		13.1	14.2	15.3				13.2	17.9	15.6	
	14	27 Mar-02 Apr	10.5	10.1	14.0	12.2	10.2	12.5	11.9	16.1	16.8	15.3			13.2	17.9	14.5	
	15	03 Apr-09 Apr	11.1	9.1	13.1	14.9	8.2	11.8	12.2	12.8	14.7				14.8	15.5	10.8	
	16	10 Apr-14 Apr	11.0	11.6	14.6	14.3	16.2	15.0	11.2	10.5	14.5	20.0	21.3	14.2	16.2	15.0	14.7	
		District Total		11.0	11.0	14.0	12.0	13.6	11.0	12.4	12.9	14.5	14.6	16.0	13.5	16.1	14.5	14.4
		Area Total					12.4			12.5		14.1				16.1		

Appendix Table 12. Average weight of chinook salmon harvested in the winter troll fishery, 1 October 1982 to 14 April 1983.

Year	Stat.	Inclusive Week	Southern Inside Districts						Southern Outside Districts				Northern Inside Districts				Northern Outside Districts			
			101	102	105	106	107	108	103	104	109	110	111	112	114	113	103	Total		
1982	40	01 Oct-02 Oct						13.5								11.6	15.5	12.6		
	41	03 Oct-09 Oct	11.6	13.4	14.2	14.2	13.3	13.6			16.1	13.1	14.3	15.5	16.5	10.8	14.5			
	42	10 Oct-16 Oct	5.8	11.4		12.2		19.8			13.0			16.6	15.0	11.2	14.7			
	43	17 Oct-23 Oct	13.1	11.5	14.3	13.0		19.5			18.5	18.7		14.7	12.8	11.9	13.8			
	44	24 Oct-30 Oct	12.3	12.3		15.2	41.1	11.6		20.3	16.8			14.6	16.7		16.1			
	45	31 Oct-06 Nov	11.4	12.0		13.9	16.6	15.0			15.9	21.0		14.7	17.4		13.9			
	46	07 Nov-13 Nov	9.1	11.8		15.8	12.1	17.0	11.0			24.0		14.4	13.7		13.9			
	47	14 Nov-20 Nov	14.4	12.3		15.3		18.8				11.0		14.8	16.3		13.8			
	48	21 Nov-27 Nov								11.6				15.3	15.8		14.8			
	49	28 Nov-04 Dec		15.4		17.0		15.0				14.5		16.9	16.6		16.2			
	50	05 Dec-11 Dec	13.8	13.0		17.0			12.2						17.2		14.5			
	51	12 Dec-18 Dec	16.4			17.0	16.7								14.7		16.8			
	52	19 Dec-25 Dec					19.0					11.0			14.7		17.0			
	53	26 Dec-31 Dec		15.1			14.9								18.1		15.3			
1983	1	01 Jan-01 Jan												21.0		21.0				
	2	02 Jan-08 Jan				23.5	16.0	11.0			13.0			17.9	14.0		14.6			
	3	09 Jan-15 Jan													12.5		12.5			
	4	16 Jan-22 Jan				16.0	14.0	11.3						14.6	12.9		13.7			
	5	23 Jan-29 Jan				12.0				19.0				14.6	15.0		15.3			
	6	30 Jan-05 Feb	12.7	12.6	11.8		24.6				14.0			15.5	16.3		15.0			
	7	06 Feb-12 Feb	16.5		12.0	16.0	13.3				12.4			13.5	18.0		13.9			
	8	13 Feb-19 Feb	13.8	16.1	13.0		11.0	12.6		14.0				16.1	14.1		13.9			
	9	20 Feb-26 Feb	11.6		20.0		14.0			16.0				14.2	14.5		14.4			
	10	27 Feb-05 Mar	7.7		14.1	16.3		12.1	13.4	14.3	13.7	15.4		15.1	9.7	10.0	13.8			
	11	06 Mar-12 Mar				15.2	12.0	15.0	11.2	17.8	8.0			14.2	16.7		14.7			
	12	13 Mar-19 Mar	13.0		13.5	15.7	8.8	17.5	9.0	16.7	14.2			15.8	16.8		15.3			
	13	20 Mar-26 Mar	16.6	16.5		16.2	16.1	17.9	13.8	20.6	20.0			15.5	16.5	15.0	15.9			
	14	27 Mar-02 Apr	12.8		12.0	13.0	13.8	12.6	12.7	17.3	19.0			17.5	15.9		15.9			
	15	03 Apr-09 Apr	12.2	9.5		13.9	14.6	18.9	13.7	11.1	14.4	14.5		18.2	16.5	14.4	15.2			
	16	10 Apr-14 Apr	15.8	11.1	13.9	15.5	15.0	15.0	13.2	10.6	17.3	21.5		19.0	17.9	16.9	16.8	16.2		
District Total			13.5	12.9	13.8	14.8	14.9	14.2	13.2	12.5	15.0	15.1	11.0	15.5	15.8	15.7	13.0	14.9		
Area Total					14.1					13.1			15.6			15.2				

Appendix Table 13. Average weight of chinook salmon harvested in summer troll fishery, 1983.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts					Northern Outside Districts					Total					
		101	102	105	106	107	108	103	104	152	109	110	111	112	115	113	114	116	154	157	181	183	189			
21	15 May-21 May	13.3	13.0	16.5	15.2	15.1		15.1	15.4		15.0	15.1		19.5		16.2	14.7	15.8	17.9	16.3	14.7		15.6			
22	22 May-28 May	12.4	12.3	14.7	15.3	14.1	11.9	14.3	15.3		14.8	14.6		17.4		16.2	14.4	16.0	22.4	18.0	15.3	15.4	18.7	15.4		
23	29 May-04 Jun	13.9	12.4	15.6	13.9	14.1	15.3	14.5	15.6		15.5	14.8		15.4		15.9	14.4	15.7	21.3	16.9	14.0	14.1		15.1		
24	05 Jun-07 Jun	12.1	11.9	14.1	14.3	13.8		14.4	16.4		15.4	16.0		16.6		17.1	14.5	15.8	18.2	14.4	21.5	11.6	11.1		15.5	
27	01 Jul-02 Jul	13.8	14.1	16.3	12.3	11.5		15.5	16.8		14.3	13.6		13.3	10.5	17.2	14.3	17.1							16.1	
28	03 Jul-09 Jul	12.9	13.7	16.4	12.5	12.0		15.7	14.8		15.0	13.6		13.8	9.0	18.4	14.7	15.9	21.1	18.9		11.0	13.5		16.7	
29	10 Jul-16 Jul	12.9	13.0	16.2	10.6	12.2	13.4	15.3	17.6	15.5	15.3	13.9		13.4	8.5	19.3	14.7	17.0	22.3	20.4	13.1	11.8			17.1	
30	17 Jul-23 Jul	12.2	12.1	10.4	11.5	8.3		15.1	17.6		14.0	6.5		15.3	10.3	19.3	14.5	15.8	19.3	18.3		13.3	15.6			16.5
31	24 Jul-30 Jul	12.4	12.4	14.0	12.0	10.7	10.7	15.2	17.1		15.0	11.8		12.4		18.6	16.3	16.9			11.1				17.0	
32	31 Jul-04 Aug	11.9	13.4	15.3	10.9			14.4	17.4		16.0	11.5		13.2	10.0	17.8	15.0	14.6		15.4	12.7	10.9	15.0		16.3	
District Total		12.5	12.6	14.9	12.5	13.8	13.1	14.8	15.9	15.5	15.2	13.0		14.2	8.1	18.0	14.7	15.8	20.0	15.7	16.6	12.3	14.2		16.1	
Area Total		13.0						15.7			14.4					17.2										

Appendix Table 14. Average weight of chinook salmon harvested in summer power troll fishery, 1983.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts						Northern Outside Districts						Total
		101	102	105	106	107	108	103	104	152	109	110	112	113	114	116	154	157	181	183	189		
21	15 May-21 May	12.4	12.3	16.6	14.4	14.9		14.7	15.3		15.2	14.6		16.2	14.7	15.9	17.9	16.3					15.6
22	22 May-28 May	12.0	12.2	14.9	14.9	13.6	11.9	14.0	15.2		14.4	14.5	13.4	16.2	14.4	16.1	22.4	18.0	15.3	16.4			15.5
23	29 May-04 Jun	13.9	12.6	16.1	13.5	12.9	15.3	14.0	15.6		15.5	14.6	14.5	15.9	14.2	15.8	21.3	16.9		15.1	14.1		15.2
24	05 Jun-07 Jun	11.6	11.8	14.1	14.3	13.5		14.2	16.4		15.2	16.4	16.0	17.2	14.6	15.8	18.2	14.4	21.5	11.9	11.1		15.6
27	01 Jul-02 Jul	18.3	18.9	17.1	12.9	11.8		14.9	16.9		13.8		12.2	17.2	18.1	17.1							16.5
28	03 Jul-09 Jul	12.8	14.1	16.7	12.5	11.4		16.1	14.6		15.0	13.4	13.5	18.4	15.3	15.9	21.1	18.9		10.8	13.5		16.9
29	10 Jul-16 Jul	12.4	12.8	15.6	10.5	12.1		15.2	17.7	15.5	15.1	15.0	14.4	19.5	15.3	17.7	22.3	20.4	13.1	11.7			17.6
30	17 Jul-23 Jul	11.9	12.0	9.1	11.8	8.3		14.8	17.6		13.7	5.9	17.8	19.3	14.8	16.2	19.3	18.3		13.5	15.6		16.8
31	24 Jul-30 Jul	12.5	12.6	13.9	11.9	10.7		16.0	17.1		15.7	11.8	11.4	18.7	17.3	17.0					11.8		17.3
32	31 Jul-04 Aug	12.2	13.6	15.2	10.8			14.2	17.5		15.9	11.5	13.6	17.8	15.2	14.5		15.4	12.7	11.6	15.0		16.4
District Total		12.3	12.7	14.7	12.5	13.2	13.9	14.7	15.9	15.5	15.1	12.7	14.3	18.1	14.9	15.9	20.0	15.7	16.6	12.1	14.1		16.3
Area Total					12.9					15.7			14.3							17.3			

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Appendix Table 15. Average weight of chinook salmon harvested in the summer hand troll fishery, 1983.

Stat. Week	Inclusive Dates	Southern Inside Districts						Southern Outside Districts			Northern Inside Districts				Northern Outside Districts				Total
		101	102	105	106	107	108	103	104	109	110	112	115	113	114	116	183	189	
21	15 May-21 May	13.8	13.8	16.4	15.7	15.3		15.3	15.9	14.5	15.2	19.5		16.0	14.7	12.4	14.7	15.5	
22	22 May-28 May	13.8	12.5	14.0	16.5	15.0		14.6	16.0	15.0	15.2	18.7		15.6	14.4	11.9	15.0	18.7	14.8
23	29 May-04 Jun	17.0	12.1	14.9	15.9	15.9		15.0	16.0	15.6	15.1	16.4		15.8	14.6	12.9	13.1		14.9
24	05 Jun-07 Jun	14.1	11.9	15.1	14.8	14.2		14.8	16.4	16.3	14.3	17.3		16.3	14.1	11.3	11.2		14.5
27	01 Jul-02 Jul	13.1	13.7	15.8	11.5	10.1		15.9	16.4	15.6	13.6	13.6	10.5	17.3	13.6				15.3
28	03 Jul-09 Jul	13.1	12.3	16.0	12.5	13.6		15.3	16.9	15.0	14.1	14.2	9.0	18.3	13.3	12.5	13.6		15.3
29	10 Jul-16 Jul	14.9	13.3	17.7	10.8	12.4	13.4	15.5	16.7	16.0	13.1	13.0	8.5	16.0	13.3	14.6	12.3		14.4
30	17 Jul-23 Jul	13.5	12.6	15.6	9.4			15.3	17.2	15.0	10.9	13.2	10.3	17.9	13.3	14.7	12.4		14.6
31	24 Jul-30 Jul	11.9	11.5	14.4	12.1		10.7	14.6	16.8	16.2	11.6	13.0		17.9	13.9	16.8	10.7		14.7
32	31 Jul-04 Aug	10.2	12.3	15.8	11.3			14.7	16.5	16.4	11.6	12.9	10.0	18.1	14.2	17.6	10.6		14.6
District Total		13.2	12.4	15.5	12.5	14.8	12.0	15.1	16.5	15.7	13.7	14.2	9.5	17.0	14.1	15.0	12.6	18.7	14.8
Area Total				13.3					15.6				14.6			15.7			

Appendix Table 16. Average weight of chinook salmon harvested by purse seine gear by district and statistical week, 1983.

Stat. Week	Inclusive Dates	District												Total
		101	102	103	104	105	106	107	109	110	112	113	114	
28	03 Jul-09 Jul				15.7									15.7
29	10 Jul-16 Jul	12.0			18.1						7.8			17.3
30	17 Jul-23 Jul	16.9	17.4		17.2						9.3	10.4	10.3	15.9
31	24 Jul-30 Jul	14.1	14.4		18.4				8.2	7.9	10.3	13.0	12.0	16.3
32	31 Jul-06 Aug	18.6	13.9		18.3				5.5	9.9	9.6	12.2	13.9	14.8
33	07 Aug-13 Aug	16.5		14.9	17.6	20.0	22.0	14.0	9.5		16.5	13.3		16.7
34	14 Aug-20 Aug	14.3	11.9	14.6	17.8		6.3				8.8	11.9		16.1
35	21 Aug-27 Aug	16.2	12.8	16.6	19.2	19.1			7.8		9.4	6.7		18.2
36	28 Aug-03 Sep	13.0	12.5						5.0					12.1
37	04 Sep-10 Sep													
38	11 Sep-17 Sep		9.0										3.3	3.5
District Total		15.4	13.7	15.3	17.3	19.2	9.8	14.0	8.0	8.3	10.7	12.3	10.7	16.1

Appendix Table 17. Average weight of chinook salmon harvested by gillnet gear by district and statistical week, 1983.

Stat. Week	Inclusive Dates	District					Total
		101	106	108	111	115	
25	12 Jun-18 Jun	11.3					11.3
26	19 Jun-25 Jun	13.6	11.2		10.0	9.7	12.2
27	26 Jun-02 Jul	13.1	8.9		8.4	7.0	10.6
28	03 Jul-09 Jul	11.5	8.8		8.8	6.9	8.7
29	10 Jul-16 Jul	12.0	10.5		7.9	9.0	9.4
30	17 Jul-23 Jul	11.0	8.7		6.7	7.0	8.4
31	24 Jul-30 Jul	9.5	8.1		7.4	6.7	7.4
32	31 Jul-06 Aug	9.4	15.3		7.4	7.4	7.8
33	07 Aug-13 Aug	13.3	7.1		7.3	7.6	7.9
34	14 Aug-20 Aug	9.3	8.4		7.1	8.1	8.1
35	21 Aug-27 Aug	10.2	6.9	7.2	8.4	8.1	8.2
36	28 Aug-03 Sep	8.4	8.7	8.4	7.1	7.6	7.7
37	04 Sep-10 Sep	8.4	8.9	11.1	10.5	10.2	9.8
38	11 Sep-17 Sep	6.8	10.6	10.0	7.0	10.6	10.3
39	18 Sep-24 Sep	9.1	11.3	13.0	16.0	10.0	10.3
40	25 Sep-01 Oct		8.3			10.9	9.1
41	02 Oct-08 Oct					12.3	12.3
42	09 Oct-15 Oct					8.0	8.0
District Total		12.1	8.7	9.9	8.4	7.7	9.1

Appendix Table 18. Andrews Creek (108-40-020) weir count for chinook salmon, 1983.

Date	Number		Proportions	
	Daily	Cumulative	Daily	Cumulative
July 14	1	1	0.00231	0.00231
15	2	3	0.00463	0.00694
16	0	3	0.00000	0.00694
17	0	3	0.00000	0.00694
18	2	5	0.00463	0.01157
19	0	5	0.00000	0.01157
20	0	5	0.00000	0.01157
21	5	10	0.01157	0.02315
22	7	17	0.01620	0.03935
23	9	26	0.02083	0.06019
24	0	26	0.00000	0.06019
25	9	35	0.02083	0.08102
26	5	40	0.01157	0.09259
27	33	73	0.07639	0.16898
28	18	91	0.04167	0.21065
29	9	100	0.02083	0.23148
30	18	118	0.04167	0.27315
31	72	190	0.16667	0.43981
August 1	10	200	0.02315	0.46296
2	3	203	0.00694	0.46991
3	6	209	0.01389	0.48380
4	0	209	0.00000	0.48380
5	1	210	0.00231	0.48611
6	4	214	0.00926	0.49537
7	9	223	0.02083	0.51620
8	8	231	0.01852	0.53472
9	14	245	0.03241	0.56713
10	1	246	0.00231	0.56944
11	30	276	0.06944	0.63889
12	0	276	0.00000	0.63889
13	3	279	0.00694	0.64583
14	13	292	0.03009	0.67593
15 1/	110	402	0.25463	0.93056
16	1	403	0.00231	0.93287
17	5	408	0.01157	0.94444
18	2	410	0.00463	0.94907
19	3	413	0.00694	0.95602
20	6	419	0.01389	0.96991
21	8	427	0.01852	0.98843
22	1	428	0.00231	0.99074
23 2/	0	428	0.00000	0.99074
24 2/	0	428	0.00000	0.99074
25 2/	0	428	0.00000	0.99074
26 2/	0	428	0.00000	0.99074
27	3	431	0.00694	0.99769
28	1	432	0.00231	1.00000
29	0	432	0.00000	1.00000
30 3/	0	432	0.00000	1.00000

1/ Weir flooded out; fish estimated.

2/ Weir flooded.

3/ Weir pulled on 31 August.

Appendix Table 19. King Salmon River (111-70-010) weir count for chinook salmon, including jacks, 1983.

Date	Number		Proportions	
	Daily	Cumulative	Daily	Cumulative
June 27	1	1	0.00331	0.00331
28	0	1	0.00000	0.00331
29	0	1	0.00000	0.00331
30	0	1	0.00000	0.00331
July 1	1	2	0.00331	0.00662
2	0	2	0.00000	0.00662
3	0	2	0.00000	0.00662
4	0	2	0.00000	0.00662
5	0	2	0.00000	0.00662
6	7	9	0.02318	0.02980
7	10	19	0.03311	0.06291
8	26	45	0.08609	0.14901
9	62	107	0.20530	0.35430
10	20	127	0.06623	0.42053
11	6	133	0.01987	0.44040
12	11	144	0.03642	0.47682
13	9	153	0.02980	0.50662
14	5	158	0.01656	0.52318
15	10	168	0.03311	0.55629
16	5	173	0.01656	0.57285
17	11	184	0.03642	0.60927
18	8	192	0.02649	0.63576
19	35	227	0.11589	0.75166
20	11	238	0.03642	0.78808
21	5	243	0.01656	0.80464
22	10	253	0.03311	0.83775
23	4	257	0.01325	0.85099
24	8	265	0.02649	0.87748
25	3	268	0.00993	0.88742
26	4	272	0.01325	0.90066
27 1/	30	302	0.09934	1.00000

1/ Weir pulled on 27 July, 30 fish estimated downstream.

Appendix Table 20. Little Trapper Lake (111-32-245) weir count for chinook salmon, 1983.

Date	Number		Proportions	
	Daily	Cumulative	Daily	Cumulative
August 1 1/	1	1	0.08333	0.08333
2	0	1	0.00000	0.08333
3	0	1	0.00000	0.08333
4	0	1	0.00000	0.08333
5	0	1	0.00000	0.08333
6	1	2	0.08333	0.16667
7	1	3	0.08333	0.25000
8	1	4	0.08333	0.33333
9	0	4	0.00000	0.33333
10	0	4	0.00000	0.33333
11	2	6	0.16667	0.50000
12	0	6	0.00000	0.50000
13	0	6	0.00000	0.50000
14	0	6	0.00000	0.50000
15	0	6	0.00000	0.50000
16	0	6	0.00000	0.50000
17	1	7	0.08333	0.58333
18	1	8	0.08333	0.66667
19	0	8	0.00000	0.66667
20	2	10	0.16667	0.83333
21	0	10	0.00000	0.83333
22	0	10	0.00000	0.83333
23	0	10	0.00000	0.83333
24	1	11	0.08333	0.91667
25	0	11	0.00000	0.91667
26	0	11	0.00000	0.91667
27 2/	1	12	0.08333	1.00000

1/ Weir installed on 9 July. No chinook salmon were counted from 9 July to 31 July.

2/ Weir pulled on 15 September. No chinook salmon were counted from 28 August to 15 September.

Appendix Table 21. Situk River (182-70-010) weir count for chinook salmon, 1983.

Date	Number		Proportions	
	Daily	Cumulative	Daily	Cumulative
June 23 1/	3	3	0.00353	0.00353
24	24	27	0.02827	0.03180
25	0	27	0.00000	0.03180
26	1	28	0.00118	0.03298
27	2	30	0.00236	0.03534
28	3	33	0.00353	0.03887
29	1	34	0.00118	0.04005
30	8	42	0.00942	0.04947
July 1	0	42	0.00000	0.04947
2	2	44	0.00236	0.05183
3	3	47	0.00353	0.05536
4	2	49	0.00236	0.05771
5	8	57	0.00942	0.06714
6	5	62	0.00589	0.07303
7	2	64	0.00236	0.07538
8	0	64	0.00000	0.07538
9	0	64	0.00000	0.07538
10	3	67	0.00353	0.07892
11	2	69	0.00236	0.08127
12	2	71	0.00236	0.08363
13	3	74	0.00353	0.08716
14	5	79	0.00589	0.09305
15	5	84	0.00589	0.09894
16	8	92	0.00942	0.10836
17	2	94	0.00236	0.11072
18	6	100	0.00707	0.11779
19	4	104	0.00471	0.12250
20	24	128	0.02827	0.15077
21	8	136	0.00942	0.16019
22	97	233	0.11425	0.27444
23	2	235	0.00236	0.27680
24	5	240	0.00589	0.28269
25	54	294	0.06360	0.34629
26	14	308	0.01649	0.36278
27	13	321	0.01531	0.37809
28	29	350	0.03416	0.41225
29	12	362	0.01413	0.42638
30	2	364	0.00236	0.42874
31	12	376	0.01413	0.44287
August 1	7	383	0.00824	0.45112
2	15	398	0.01767	0.46879
3	53	451	0.06243	0.53121
4	11	462	0.01296	0.54417
5	9	471	0.01060	0.55477
6	143	614	0.16843	0.72320
7	18	632	0.02120	0.74441
8	20	652	0.02356	0.76796
9	75	727	0.08834	0.85630
10	37	764	0.04358	0.89988
11	30	794	0.03534	0.93522
12	13	807	0.01531	0.95053
13	5	812	0.00589	0.95642
14	15	827	0.01767	0.97409
15	14	841	0.01649	0.99058
16	3	844	0.00353	0.99411
17	5	849	0.00589	1.00000
18 2/	0	849	0.00000	1.00000

1/ Weir installed on 10 June. No chinook salmon were counted from 10 June to 23 June.

2/ Weir pulled on 18 August.

Appendix Table 22. Crystal Lake Hatchery (Crystal Creek, 106-44-031) weir count for chinook salmon, including jacks, 1983.

Date	Number 1/		Proportions	
	Daily	Cumulative	Daily	Cumulative
August 3	125	125	0.09608	0.09608
4	0	125	0.00000	0.09608
5	0	125	0.00000	0.09608
6	0	125	0.00000	0.09608
7	0	125	0.00000	0.09608
8	295	420	0.22675	0.32283
9	0	420	0.00000	0.32283
10	0	420	0.00000	0.32283
11	0	420	0.00000	0.32283
12	0	420	0.00000	0.32283
13	0	420	0.00000	0.32283
14	0	420	0.00000	0.32283
15	751	1,171	0.57725	0.90008
16	0	1,171	0.00000	0.90008
17	0	1,171	0.00000	0.90008
18	25	1,196	0.01922	0.91929
19	0	1,196	0.00000	0.91929
20	0	1,196	0.00000	0.91929
21	0	1,196	0.00000	0.91929
22	0	1,196	0.00000	0.91929
23	81	1,277	0.06226	0.98155
24	0	1,277	0.00000	0.98155
25	0	1,277	0.00000	0.98155
26	0	1,277	0.00000	0.98155
27	0	1,277	0.00000	0.98155
28	0	1,277	0.00000	0.98155
29	12	1,289	0.00922	0.99078
30	0	1,289	0.00000	0.99078
31	0	1,289	0.00000	0.99078
September 1	0	1,289	0.00000	0.99078
2	0	1,289	0.00000	0.99078
3	0	1,289	0.00000	0.99078
4	0	1,289	0.00000	0.99078
5	0	1,289	0.00000	0.99078
6	0	1,289	0.00000	0.99078
7	0	1,289	0.00000	0.99078
8	6	1,295	0.00461	0.99539
9	0	1,295	0.00000	0.99539
10	0	1,295	0.00000	0.99539
11	0	1,295	0.00000	0.99539
12	0	1,295	0.00000	0.99539
13	0	1,295	0.00000	0.99539
14	0	1,295	0.00000	0.99539
15	0	1,295	0.00000	0.99539
16	0	1,295	0.00000	0.99539
17	0	1,295	0.00000	0.99539
18	0	1,295	0.00000	0.99539
19	0	1,295	0.00000	0.99539
20	0	1,295	0.00000	0.99539
21	0	1,295	0.00000	0.99539
22	0	1,295	0.00000	0.99539
23	0	1,295	0.00000	0.99539
24	0	1,295	0.00000	0.99539
25	0	1,295	0.00000	0.99539
26	6	1,301	0.00461	1.00000

1/ Fish were not counted daily.

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